

Break

For younger listeners

When Peter Maxwell Davies' CBE was announced last week, *The Times* referred to him as composer of the soundtrack for Ken Russell's film, *The Devils*. A particularly perverse and inadequate piece of captioning, writes Hilary Flinch, for a British composer whose Second Symphony was premiered in Boston last February to international critical acclaim and whose consistent and prolific output of music for every medium has established him as one of the most important and interesting composers of our time.

Like Benjamin Britten, and arguably to a far greater and more complex extent, working with children and young people has been crucial both to his development as composer and to the direction and content of music in education over the last two decades. (He even wrote a piece on "Where Our Colleges Fail" for *The TES* in 1967).

While his own music grew simpler and clearer and began to assimilate something of the arrangements of works by other composers which he was transcribing for school groups, he was, as director of music at Cirencester Grammar, evolving teaching methods closely integrated with the creation and performance of his works.

He is artistic director of the Orkney Festival and this has given him (as an adopted native of the islands) and the local schoolchildren a platform for work such as his two-act opera, *The Kiddlers* (1978), *Kirkwall Shop* (1979), and, last year, the group musical *Verdell*. His compositions have been written for non-specialist players, singers and actors, and this year at the Orkney Festival.

When he was 16, back in his native



Peter Maxwell Davies: "Composers must write for children."

He springs to life again, and tomorrow sees the premiere of yet another new music-theatre work, *The Rainbow*, written this time for Stromness Primary School. The hero, Pat, is sent out of the classroom for inattention during a lesson about rainbows; but he is to find out rather more than he thought about the subject from a dog, a donkey, and the island selkies.

"Composers must write for children: they are the performers and listeners of the future," says Maxwell Davies. Already a first generation of those who have been nurtured by his words and his music are eagerly awaiting the first London performance next month of his comic-chilling, *Verdell*. The composer, Sadlers Wells, by the way, is offering concessionary double tickets for those who bring a copy of *The TES* to the performance. Phone 01-353 1072 for details.

Chip-chat

Mr Kenneth Baker, dynamic Heathite turned Thatcher-minister, showed up at last Saturday's Conservative education conference to wax enthusiastic about computers in schools. It was a noble way to pass the only fine Saturday this year. The only snag was, a computer seemed to have got at his script.

"My own children like interfacing with the television set," he burred. Which was followed by: "When you use screen-based microprocessors, the learning curve goes up very sharply indeed." Meaning presumably, that children learn more and faster from computers than people.

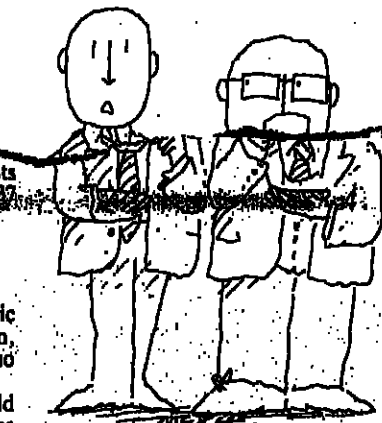
Oh dear. First he wanted to break up the ILEA and now he's started to talk computer-speak. He'll be in the Cabinet next.

Paper tiger?

Though a copy of the Government's turquoise terrible, *The School Curriculum*, should by now have plopped through every school's letterbox, the Department of Education seems to be doing little to follow it up as if it meant what it said. It has not gone unnoticed that reluctance among DES officials to tread the usual round of conferences and meetings that are so much part of the education system's digestive process.

Her Majesty's Inspectors, finding themselves constantly fronting for their administrator colleagues, are at pains to disown the document as one of theirs. Meanwhile, the Schools Council is stomping the country, willing to talk wherever two people are gathered together about its rival *Practical Curriculum*.

"Imagine having pupils so bright that getting the wrong GCSE paper made a difference."



"Imagine having pupils so bright that getting the wrong GCSE paper made a difference."

Personal column

Mary Warnock

The medium and the message

In the new climate of educational thought, the question may be raised whether old-style adult education any longer makes sense. Who are the adults? What do they want to learn? Who is to teach them? This uncertainty is reflected in a spate of conferences among those who are concerned with broadcasting. It seems as if radio and television ought to be great forces in the world of adult education but no one is clear how they are to be used.

It is often assumed that the greatest use of broadcast adult education is for those for whom school has failed. They should be seduced into learning the things they didn't learn at school but how are we to ensure that those who refused the nourishing well-balanced meal will not also jib at the supplementary vitamin pills? Wherever, however, it is undertaken, being taught is hard work, and being taught by radio or television takes even more determination than being taught at school, where there is not much else to do.

Well, it is argued, we must stop thinking in terms of pupil and teacher. We must give up the assumption that being educated entails being taught. Broadcast adult education must get right away from the fatal dichotomy of teacher and pupil, Miss and Us.

But this is misleading. If the teacher/pupil relation were eliminated the outcome would be something that was

sense, all experience is education, but only if it is taken as such. Experience must be seen as a fit matter for theory, or for future experience which, based on the present, will yield increasing rewards. Simply to go abroad for your holiday is not itself education; it becomes so if, enjoying it, you see what it means, what, other than itself, it pointed towards. It will be education if it leads to a desire to see more and understand more. Most people need a teacher for this, a guide whose role is to help his pupil to get the reward that he wants. It is for this reason that the old distinction between adult education and ordinary broadcast output cannot be entirely given up. The normal role of the broadcaster cannot be that of teacher. In educational broadcasting it

must be. So the difficulties remain. How is the viewer or listener who needs education to be attracted to it?

One fashionable answer is to use the buck. Radio and television, it is said, should not even try to educate but should only inform, putting people in the way of finding those who can teach them. The BBC used this technique with brilliant effect in their adult literacy programmes some years ago. They simply directed people to local teachers and did not attempt to teach themselves. The Yorkshire television series *Make It Count*, aiming to help the same for adult numeracy, was successful because it attempted to teach and to help viewers to find outside teachers. The combination of functions did not wholly come off.

There is a great deal of talk at the moment about the need for educational programmes to deploy outside agencies, to work in conjunction with voluntary programmes, volunteer, and community do-gooders of all kinds. The education division of the IBA is about to set up a liaison unit to facilitate all this referral (see *LEA* Heron's accurate article, *TES*, April 22, 1981), and every regional company is to have officers whose task it is to arrange follow-up for adult education programmes.

A change in the custodial relationship between teachers and pupils to that children both below and above could go out on work and even home experience.

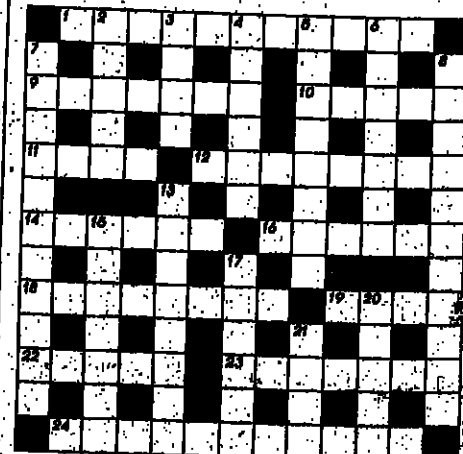
A new approach to in-service teacher training and staff development. A much wider use of premises to include schools, FE colleges and work-

places. A gradual break from traditional ways of examining to a profile-based system of learning contracts between pupils and teachers, as there are in a kind of work, where pupils discuss with parents and teachers the most suitable courses.

The conference held at Stoke Rochford was sponsored by the NUT, NAHFE, DES and MSC and was attended by representatives of all the main teaching unions. Its aim was "to explore how young people in the 14-19 age group can be helped by schools;

we must not lose faith in the educational power of broadcasting because we find it hard to define a role for adult education. To do so is to put time-when you are about to put most foolish and extravagant wasteful.

TES Crossword No. 4 by Ruth



Across
1 Looking for scraps? (11)
2 They pound away with mortar (7)
3 A doctor, A behind the play (5)
4 Society is better off without it (4)
5 A whole, perhaps? That would be telling! (8)

Down
6 She ruined Hamlet (5)
7 A false impression (5)
8 Check the breakwaters (8)
9 In certain charts it may indicate a mile (4)
10 Easily shattered by lead (5)
11 Turn that musical or legal, perhaps? (7)
12 Possibly one's private abomination (5,8)

Arístides

THE TIMES Educational Supplement

FRIDAY JUNE 26 1981 NUMBER 3392

Radical changes to make room for jobless

by David Lister

Radical changes in the secondary school curriculum and the involvement of schools in schemes for the young unemployed were discussed this week at a meeting of teachers' leaders and officials from the Department of Education and the Manpower Services Commission.

Mr Jack Chambers, president of the National Union of Teachers, described the three-day meeting as a "major new initiative which could radically alter the nature of secondary education."

The main changes outlined at the meeting included:

• Youngsters on the youth opportunities programme and other MSC schemes returning to school on a part-time basis.

• A change in the custodial relationship between teachers and pupils so that children both below and above could go out on work and even home experience.

• A new approach to in-service teacher training and staff development.

• A much wider use of premises to include schools, FE colleges and work-

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Candida Valentine with the harpsichord she made and decorated. It was part of an exhibition of students' work at the London College of Furniture.

Micro waves

Criticism of the Government subsidy for school computers is growing, with experts saying that the Department of Industry has chosen the wrong machines.

The 50 per cent subsidy is available to schools that purchase the recommended Acorn Atom or the Research Machine 380Z. But both machines have severe limitations, as A. K. Hennessey, of the University of Manchester Institute of Science and Technology, explains on page 38.

The pilot schemes would include a number of schools "pursuing alternative curricular pathways."

The changes needed in the curriculum for 14 to 19-year-olds have been discussed for some time by NUT leaders, and Mr Chambers in particular wants to see considerable progress during his presidential year.

Before the conference a number of NUT leaders saw Lord Gower, junior employment minister. He expressed interest, but wondered how well teachers would be able to cope with

Continued on page 3

University for the aged to be launched by Philip Venning

Plans to give Britain's increasing number of pensioners education for leisure in place of hours of loneliness and inactivity is to be unveiled in Cambridge next month. A group of old people will be proposing a university of the Third Age, the first name only. The courses would have to appeal to everyone, and there would be no academic entry requirements or final qualifications at the end.

The group draw their inspiration from similar universities that have grown up in France recently, including one at Caen which now has about 1,000 students.

They rely on the goodwill and civic responsibility of the local community, and Cambridge council, local banks and industry, will all be asked to help.

The university will not have any staff or buildings of its own. Nor will it charge fees, unless the first committee decide otherwise. Rather it will depend on the willingness of Cambridge University, technical college, and individual teachers to allow the elderly to attend existing courses or to set up special courses for them.

Many detailed problems, such as whether the old people should have access to already overcrowded university libraries, remain. But the committee is confident that they can be sorted out.

Whatever's left by them will be on its way to China if the appropriate sub-committee agrees. The authority sent 1,000 books to Malawi six months ago.

This week

School lunch down at the pub 3

Relieving the caretaker's drudgery 5

Private schools hit by fee rises 6

Chelsea College; Slurred, shamed sentenced 8

Shakespeare and tragedy 24, 27

Did Rampton look at all the evidence? 10

The politics of schooling 21-23

Structuralism on screen 41

Extra

Educational technology 33-40

Comment School to Work Overseas Letters 16, 17, 18, 19, 20, 21-23, 24, 25, 26, 27-29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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The counter-attack against sixth form and tertiary college alternatives to the all-through comprehensive school gathers apace. Last week there were reports that Opposition thinking has been steered (if only temporarily) away from proposals for a break at 16. This week comes a forceful salvo from the opposite end of the political spectrum in a paper by Mr Fred Naylor for Mrs Thatcher's Centre for Policy Studies (page 11).

Mr Naylor is an old campaigner since the period when he worked for the Schools Council on examination reform. He is a dab hand with educational statistics and has come to the firm belief that academic standards in general, and sixth form standards in particular, have suffered directly as a result of comprehensive reorganization. Not everyone reads the statistics as he does but he is one of those happy people who have few doubts. When he discusses the *Crisis in the Sixth Form*, therefore, he is considering what he regards as a series of man-made disasters, to be mitigated if possible by modifications which, by one means or another, undermine the comprehensive idea.

This may be thought to mark him off sharply from other would-be reformers of the sixth form such as the devotees of tertiary schemes, and indeed it does. But in important respects his analysis could be shared by proponents of quite different policies.

In essence he is saying that comprehensive reorganization has spread the bright students and the specialists capable of teaching to A level too thinly across the system. The average comprehensive school has 900 pupils, which means at least twice as many sixth forms have to be staffed as would be required if grammar schools had been retained.

This, says Mr Naylor (and he cannot prove it any more than he can be proved wrong), is why the upward trend in the proportion of each age group getting two A levels stopped in the seventies after a steady rise through the sixties. Stripped of its contentious overtones, the



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Mushroom sixth forms and neo-grammar schools

Naylor diagnosis of sixth form difficulties is the same as that which has been propounded over many years by the DES: sixth form teaching groups are too small, and this is inefficient. Quite rightly, Mr Naylor insists that the "crisis" is not caused by falling rolls. This phenomenon hasn't hit the A level age groups yet. And as the demographic decline is mainly a decline of working class birthrates, the class structure of upper secondary education means that the sixth form should be shielded from the full effect.

Given a crisis which is caused by trying to maintain too many separate sixth forms, the obvious answer is to look for ways of concentrating bright pupils and clever staff more effectively. Introducing a break at 16 and regrouping the 16 to 19s in another institution or institutions is one answer — the one favoured by cities like Manchester which see it as the only way to maintain the comprehensive principle while providing adequately for the varied needs of the 16 to 19s. Like any other scheme, this has its own snags. Mr Naylor lists these with some relish. Among these are the undesirability (in his view) of creating 11

to 16s schools without the prospect of advanced work to attract academically well-qualified staff; the effect on the younger pupils of the absence of the older and *vice versa*; the "permissive" pseudo-adult atmosphere of the sixth form or FE college; the dilution of the teachers' traditional pastoral role; the discontinuity between feeder schools and tertiary institutions and the brevity of a two-year course in which one year is "hallo" and the other is "goodbye".

There is no doubt that these are features of most 16 to 19 schemes which worry many people. This is not to say that a break at 16 and the development of a separate network of post-16 colleges may not still be the best bet. The trouble with concentrating on the snags of schemes proposed by proponents of change is that this can obscure the snags associated with the present arrangements. What is happening is that the present snags are becoming too great to ignore. This being so, it is especially urgent that those who favour a break at 16 should look in detail at the objections and examine the measures specifically needed to overcome them.

In his own proposals, Mr Naylor includes a reference to possible cooperative schemes in which groups of schools share sixth form facilities. But if i.e.s. were to follow his line, most of the development would go into the fairly small number of comprehensives which already have large sixth forms, viable in his terms. There would be expanded to take in pupils from neighbouring schools which would lose their sixth forms and become 11 to 16 schools.

"Mushroom-type" schemes of this kind have their own special snags, some of which were brought out by the Macfarlane report. "Schools which retain sixth forms tend to have more prestige in the eyes of many parents and have to be the most popular first choice for pupils in the 12. The residual schools suffer both from being to attract a due proportion of the most able pupils, as well as in limitations of staffing that go with both a smaller school and the absence of advanced work".

In reality, the mushroom-type sixth form combined with more emphasis on parental choice, is another way of restoring grammar schools without reintroducing the 11 plus. This is its significance at the present time and it is this which the advocates of a break at 16 will oppose. As for the strong anti-tertiary lobby within the comprehensive schools, they will find Mr Naylor and his friends very uncomfortable allies.

That said, nobody should underestimate the force of the arguments which Mr Naylor is advancing. People will attack his statistics and his use of the figures put together recently by Caroline Cox and John Marks. But he will ring many bells in Elizabeth House, not least with Lady Young and Dr Boyson. There is little which is new in Mr Naylor's analysis but this is the most plausible blue-print yet for the reestablishment of grammar schools within a comprehensive framework.

Crisis in the Classroom by Fred Naylor; Centre for Policy Studies £2.00

Personal qualities are as important as academic record according to employers

Swotting for exams a waste of time, say firms

by Philip Venning

Teachers are wasting their time putting too much pressure on pupils to pass exams — employers care much less about them than teachers think. This is one of the main findings of a detailed study of how employers recruit young people, sponsored by the Department of Employment.

In interviews with 350 firms in St Albans, Leicester, and Sunderland, Mr David Ashton and Mr Malcolm Macgregor of Leicester University found that personal qualities were often rated as highly as exam passes.

It was extremely rare for firms to specify minimum educational qualifications for a job but then take on someone with the highest academic record. It was much more usual for

exam passes to be used as a general guide to the pupil's ability or to be ignored completely.

In Leicester, 55 per cent of firms who took on skilled manual workers specified minimum qualifications but then did not rigidly enforce them. This particularly applied to offers of apprenticeships which were made before exam results were known, and were not withdrawn even if the pupil failed. Another 25 per cent recruit skilled manual workers solely on personal qualities.

For clerical and sales staff, 15 per cent of employers used minimum qualifications as a way of screening out the less able, but then took other factors into account when making the final deci-

sion. Another 65 per cent took a flexible attitude to exam passes, and 17 per cent ignored them.

At higher levels educational qualifications were more important, but were by no means the sole factor.

Two thirds of firms taking on technicians used the pupil's academic record as an initial screening process, while 30 per cent took a more flexible line. For professional and managerial jobs, 90 per cent of employers wanted minimum qualifications but also looked for other qualities. At the other extreme 90 per cent of those employing operatives had no interest in exam results. In fact a small number of skilled manual as well as operative jobs were barred to

young people who were over-qualified. The employers were looking for unquestioning factory fodder.

The researchers also looked at the claim that as more pupils passed exams the entry qualifications for certain jobs were being pushed up. They found little evidence for this. Among 195 employers, 82 per cent said that there had been no change in the last five years, 14 per cent said they were asking for higher qualifications, and 4 per cent had lowered their requirements.

Though most employers stressed the importance of the personal qualities of their recruits, few put much reliance on school reports. They preferred to judge for themselves.

Heseltine faces revolt by shire moderates

by Sarah Bayliss

A grass-roots revolt by moderate Conservatives from the shire counties against some leading right wingers in the party was staged within the Association of County Councils this week.

The feelings behind the campaign, which has been led by moderates known as the Suffolk group, were reflected in a private meeting with Mr Michael Heseltine, the Environment Secretary, on Tuesday night. They expressed anger and despair at the Government's latest moves to take grant support away from shires which had now have considered themselves the spenders and which indeed have signed every Whitehall demand for cash.

Mr Heseltine is understood to have defended the new block grant system for distributing grant but it is not known whether he gave assurances that come the autumn, many shires would escape sweeping penalties. Suffolk County Council, whose chief executive is said to have advised the

group, is the lowest spender among all the shires and yet is threatened with a £6m loss of grant this year if it does not make more cuts. Essex is judged to be overspent by a massive £17m, Cambridgeshire by £6m; both are active members of the group.

All the shires have deeply resented Mr Heseltine's new target which says they must spend 5.6 per cent less than they spent in 1978-79. In that year many were already making substantial cuts. The Suffolk group want the baseline changed.

As *The TES* went to press, the ACC Tory group which has 99 members, a majority of 19 over 61 Labour, 12 Independent and 7 Liberal, elected Mr John Lovell from East Sussex as its leader. The executive council elected Mr John Horrell, chairman of Cambridgeshire education committee, as its chairman and Sir John Grurgeon, leader of Kent County Council, as its vice-chairman.

The VAT man cometh . . . ?

Education authorities throughout the United Kingdom are awaiting with bated breath the outcome of a tussle between Granatino Regional Council and the local VAT inspectorate, which is insisting that VAT be levied on evening class fees for non-vocational students.

In what is a test case, Granatino is opposing the ruling although they will pay the 15 per cent VAT rate next month pending the outcome of an appeal to the VAT tribunal which the council is currently preparing. Sources within the region say that the council will fight all the way to the Court of Session and House of Lords if necessary.

A spokesman for the Advisory Council for Adult and Continuing Education in England and Wales said that VAT rulings had been issued south of the border but local authorities had accepted them. Granatino was the first authority to appeal. "We are awaiting the outcome of this case with great interest," he said.

Jobless leavers treble this term

Registered school leaver unemployment has trebled since the start of the summer term.

With the end of the term still to come, it is now certain that more than one in three leavers will be out of work this winter.

The June Department of Employment figures published on Tuesday show that there are now 208,000 school leavers registered as unemployed in Great Britain — 140,000 more than the April figures.

There are also now more than 160,000 under 18s in the Government's special programmes — 15,000 more than at the start of this term.

There are now at least 300,000 leavers on the register or in the Youth Opportunities Programme, some of whom have been jobless for more than a year.

It is estimated that another 150,000 leavers will join the register during the next two months.

Radical changes

Continued from page 1

There would be a new client group at 16. Teachers' leaders are aware that many teachers will feel uneasy about the change, but are equally aware that with the promise of a new influx of pupils at 16 might have distinct advantages.

Mr Chambers said this week: "I think that it is time now for the schools to be preoccupied with the attainment and to develop the necessary skills for working life. This will be a major shift in the way we think about schools."

"In addition, there will have to be a change in the custodial relationship. Teachers by law are expected to have all the children to 16. But sufficient resources are not made available and the exam system is too limiting. It is a straight jacket."

"So, for example, kids could design their own leisure programme. In French, for instance, the youngsters could be able to get themselves to Boulogne and back and order a meal in a restaurant. They can't do that with GCE French but they could do it with life skills."

At 16 there will be a new clientele coming back and they will have to be treated differently — not as school pupils. They would have to be paid a wage. Part of the time could be spent in a school or college, part in industry and part on a programme such as Outward Bound," he added.



School lunch at *franco* at the Olton Hall public house, Solihull, for pupils of Ulverley primary school.

Reaching the parts that other schools don't reach

by Richard Garner

Children from one of the largest primary schools in the country have been enjoying pub grub for the past fortnight — with official approval.

A group of parents organized the outings to a public house after Mr Harry Moore, the headteacher at the 600-pupil Ulverley school in Solihull, decided to close the school buildings at lunchtime. His staff had refused to supervise lunches in protest against cuts in spending.

Mr Moore said he supported his staff's action. "Under normal circumstances, the support and goodwill of the staff is massive but the effect of the cuts is such that — for the first time — I am going to have to mix years from next September," he added. "Educationally, that's hot sound."

After the school had been closed for three days, the authority instructed him to keep it open, claiming there was a legal duty to provide free school meals and that the nine dinner supervisors could provide adequate cover. The staff protest ended on Wednesday.

Mr Chris Wild, the licensee of the pub, the Olton Hall, which is just across the road from the school, charges 50 pence for lunch. He said: "I'm making a loss. I would normally charge twice as much, but I'm doing it as a favour and for a bit of public relations."

"The children could tuck in to beefburger and chips, sausage and chips, or eggs and chips and bread and butter. We throw in a glass of orange squash," he said. "We don't allow them on the mild, bitter or scotch."

However, a warning was sounded at the conference by Mr Alastair Roberts, principal training adviser with the MSC special programmes division, who led the conference that in 1979 over 40 per cent of youngsters coming into YOP had a history of truancy.

"So, the message to schools," he said, "is that four out of ten of the youngsters you hope to attract have shown what they think of schools by voting with their feet."

Mr Tony Woodall of the DES further said there was an increasing awareness of a potentially "lost generation" and the urgent need to do something about it.

He told the conference that the contribution of the education service to YOP was "peanuts". If it was to be increased certain problems had to be

faced. These included the inexperience of the staff in dealing with the new clientele; the legality of part-time schooling; and the use that schools might want to make of not only FE lecturers but people from industry and jobs of different backgrounds. "At what stage do they become teachers, with qualified teacher status?" he asked.

The need for a radical shift in the curriculum was endorsed by Mr Robert Alken, chief education officer for Coventry. He said that schools were far too heavily biased towards exams and written work. "If you do an exam in PE you still have to write an essay," he said.

He added: "We must have a better balance between the cognitive and the affective. If you tell 40 per cent of youngsters they are not even worth examining then we are breeding insecurity and chips on shoulders which will eventually turn into aggression."

Handbook disowned by authors

by Diane Spencer

A newly-published teachers' guide to multi-racial education has been disowned by the authors.

Members of the Schools Council project team say the final version of the book misrepresents their work. A complete section is missing and one chapter is bawdier. They say the report fails to make sense, and because they wrote it in 1978, it is now out of date.

The three-year curriculum development project ended in 1976 and cost around £150,000.

The missing section was dropped mainly because it angered teacher representatives on the council's programme committee when they saw it in 1978. These included Mr Fred Jarvis and Mr Max Morris of the National Union of Teachers. The work was described as "propaganda", "anecdotal" and "a slander against teachers". The National Foundation for Educational Research was also unhappy with it.

The missing section, which set the scene for curriculum development later in the report, discussed how children acquired racial attitudes, teacher expectations and the role of the school in a multi-racial society.

It showed how prevalent racist attitudes were in schools and society and widely quoted teachers and children making racist comments.

In a brief preface to the guide, it says: "The council decided not to publish a section in which the project team gave personal views." The team claim this represented the distillation of three years' intensive work in the field which substantiated the considerable body of evidence accumulating in multi-racial education.

"It is disquieting that the Schools Council finds itself unable to publish such material," it says.

Ms Elaine Brittan, the project evaluator, is particularly upset because her's is the only name mentioned in the report and the chapter attributed to her is not her work. "It was produced without consultation and as it stands, simplistic, often illogical and inaccurate — is quite unacceptable."

Education for a Multiracial Society. Schools Council. £5.50.

Churches want change in law on RE

by Bob Doe

The law should be changed to make religious education compulsory, not religious instruction as at present, the major churches agreed this week. Giving evidence to the Commons select committee looking into the secondary curriculum, leaders of the Anglican, Catholic and Free Churches all agreed to this change, though they emphasized that Christianity should retain a central position in what was taught.

They rejected the idea of a *la carte* RE described by one MP as "a little bit of this religion, a bit of that and take what you want".

The Archbishop of Canterbury, Dr Robert Runcie, told the committee: "Religious instruction has a narrow indoctrination connotation."

He made it clear, however, that he was not in favour of a wholesale change in the legal status of religious teaching in schools and wanted "a continued commitment to some form of school worship."

He also attacked the "lamentable" way local authorities failed to appoint enough advisers in religious education. The written evidence submitted by the Church of England's Board of Education emphasized the importance of school worship for training children in the essential skills of reflective thought, sharing of rituals and meeting for a common purpose.

Cardinal Basil Hume, the Archbishop of Westminster, earlier told the committee that he too favoured the words religious education.

Comment

Rampton and race research

It becomes daily more difficult to decide whether it is the conspiracy or cock-up theory which best explains the state of race relations research.

The history of the past ten years or so is sadly littered with the debris of good research intentions which went wrong, were imperfectly executed or — more often — proved unacceptable to a vocal section of the interested parties.

So far, it is true, the Rampton Committee's Interim Report has been less criticized for its research than for the lack of it. What a pity, the leader columns have exclaimed (*The TES*'s among them), that Rampton did not have the resources, time and capability to command the research which might have helped to explain the under-achievement among West Indian pupils which the committee found.

At the time the report appeared, it was known that the National Foundation for Educational Research had been commissioned to produce a review of existing research later this year. What was not so clear was that the Committee already had an advance copy of this review at the end of last year (page 10).

In fact, the reason why the research review did not appear alongside the interim report, as originally intended, had more to do with the NFER's inability to publish anything to schedule than to design. So was it just another cock-up? In favour of the conspiracy theory it must be emphasized that although Rampton's team did have advance access to a quite detailed draft, they did not choose to modify their opinions in the light of it. When the review does appear, it will be clear that Rampton's statements about racism (as the prime cause of under-achievement) are not proven by any existing research.

On the other hand, the National Children's Bureau's longitudinal research from the National Child Development Study (available to Rampton for over a year; and noted in the NFER review) added to the accumulating evidence of the importance of home background. It is understood, however, that to describe difficult home backgrounds as a causative factor in under-achievement was not acceptable to a majority of the committee.

One of the many ironies produced by the Rampton Report was that its conclusions reflected, in official form, much the same sort of

comment that led to the suppression of the final report of the Schools Council's Multiracial Society project two years ago. Now the Schools Council has just chosen, with supreme ill-timing, to publish a cut and bowdlerised, badly edited, and scrappily produced version of that report. The research team, which produced it, have all disowned it, although one of them is named without her permission. The chapter which foreshadowed Rampton is omitted altogether on the grounds that it expresses personal opinions, although much of what remains is meaningless without it. Whatever the difficulties that beset the research team, to publish at all in this form seems doubtful ethics and will do precious little to add to the School Council's reputation at this critical time in its life.

So where do we go from here — bearing in mind that the graveyard of good intentions also contains the discarded embryo of an APU survey of West Indian achievement? Many pioneers will emerge when *Caught between*, the research review, eventually appears in late summer. It is believed to be useful, and it is known that Lord Swann feels strongly that the committee needs to attach far more importance to research.

Amid the bureaucratic confusion caused by the Swann committee regrouping, some priorities are emerging. There is little doubt that what is needed now is a set of in-depth studies (which need not be longitudinal) that seek to explain the West Indian under-achievement which undoubtedly exists. These will need to go into socio-economic factors in different communities, but to do so in a systematic research style, rather than in the form of opinionated assertion as in the Interim Report. It is difficult, and it hasn't been done properly yet, but it needs to be done. It is likely that Swann will commission something on these lines. It is impossible to hold out too many hopes for the outcome.

Getting in on the act

Mr Jack Chambers, the new president of the National Union of Teachers, set a great deal of store by the conference held at Stoke Rochford this week to explore ways of developing a more effective educational response to youth unemployment (page 5). It was an occasion without an obvious precedent: sponsored by the Manpower Services Commission, the DES, the NUT and NATFHE, the conference was attended by representatives of all the teachers' unions and culminated in the announcement of a series of pilot projects which may provide models for wider action later on.

This is a promising initiative. The unions are bound to be closely and quickly involved in any plans which disturb established patterns of



Mr Jack Chambers

secondary organization. It is likely to be extremely helpful if they are in at the start of these pilot projects. Mr Chambers is a lively and vigorous apostle of the schools' wider responsibilities. He would like to see it made a lot easier to create opportunities for boys and girls to work outside the school from 14 or 15 onwards, as part of a change in curriculum and organization aimed at linking schools more closely with working life.

There is also a desire to explore ways in which the schools could work with unemployed young people in cooperation with the Manpower Services Commission. Here there is no shortage of difficulties, especially where such schemes might involve youngsters on YOP schemes working alongside pupils who are staying on at school in the ordinary way. But the schools may be able to learn from further education: certainly the MSC is eager to enlist the support of the schools and resources they represent, and given that it is the MSC which has the money there must be a strong incentive for the schools to find ways of getting in on the act.

Behind the immediate activities discussed at the conferences were a range of pedagogic questions which stretched a long way beyond the immediate needs of the early school-leaver in a period of high unemployment. The full significance of this initiative will only become apparent if it impinges on the rest of the secondary curriculum and in particular on the examination system which prescribes the educational values which dominate the system.

No comment

"Two men who stole a gift, weather wear, from the phylax of Magdalen Tower, Oxford, found their way out of trouble when they were stopped by a policeman."

"Caught making off with the £500 value of a metal work class."

Still all right for some

A comment on Labour's plans for the Independent Schools Information Service in the shape of

Jap in co 1986

Platform

Ken Millins argues that teacher training has failed to make an impact on race relations in 15 years — "out of touch and out of date".

Rampton's basic lesson

In recent weeks, some journalists possessing pre-cognitive gifts, or more likely, pre-publication copies of the interim report of the Rampton committee, thought it bland and woolly. They could not have reached the short section on initial training. Or, if they had, they ignored it because it did not fit in with their thesis.

This section is a painful indictment. During their visits to multi-racial schools, committee members met many probationers, recently qualified from colleges, polytechnics or universities. Most were finding it hard to establish their authority. Some were barely surviving. "I just can't handle some of the West Indians," one said to me. "I've no idea what makes them tick." "I didn't expect to be told by West Indian fourth-formers what I could do with my nuggets of knowledge in four-letter basic," declared another. "I'm simply baffled by some of the West Indian parents," sighed a third. "What they want and what I'm trying to do are poles apart."

Virtually all maintained that they had received little or no help during their course to enable them to deal with such situations. Some recalled occasional sessions with visiting experts and passing references to ethnic minorities in child development or social psychology classes. Relevant method work was sketchy and teaching material difficult to come by. Several had profited from optional courses in "English as a second language" but sometimes these took place after the last teaching practice and were uncomfortably close to finals.

They were not alone in their criticisms. Since the summer of 1966, when the education panel of the National Committee for Commonwealth Immigrants urged all teacher training institutions to examine how best they could enable student teachers to play their part in the rapidly changing contemporary society, there has been a number of similar appeals from such bodies as the Community Relations Commission, the National Association for Multiracial Education, the NUT and ATCDE (later the National Association for Teachers in Further and Higher Education) and through national conferences organised by HMI. Some influence might therefore be looked for in the courses of students qualifying from, say, 1969 onwards. But nearly all the teachers who had entered the profession since that date appeared to have fared as badly as those probationers during their initial training.

The report is explicit. It paints a "dismal picture" of the failure of teacher training institutions to prepare teachers for their role in a multi-racial society. This judgement is based on evidence given by many teachers, advisers and parents. "If you do nothing else," pleaded one headteacher, "try to get across to the lecturers the universal lack of confidence felt in them in this connection."

Why has so little been achieved since 1966? Witnesses charged the trainers with being out of touch and out of date. They were thought to be playing the same worn styluses across the grooves of yesterday. Each session saw them the more

comfortably embedded in their sheltered crannies. Isolated, and insulated, from the raw cutting edges outside.

What truth is there in such accusations? It is tempting for those outside to stereotype "the teacher trainer." Let's examine two generalizations. The first is that teacher trainers "take it easy," drift in a summer punt on a placid stream. This is not so. The great majority work hard and long, lecturing, revising and devising studies with purpose and conviction — and, given the traumatic upheavals within teacher training since the middle 1970s, often with desperation too.

The second sees them as refugees from the classroom, grasping the sanctuary knocker of the college portals. This is false. Many lecturers, in their day, were successful, innovative teachers, chosen in the face of fierce competition. Other members of staff, appointed more recently, are subject specialists rather than practitioners, as economists, social psychologists, and so on.

Undeniably, professional hazards beset these teachers. The realities of the school, the imperceptibly and their classroom ability is indistinctly chipped away. Other priorities arise — not least a concern with winning academic respectability through the pursuit of advanced studies in order to strengthen the theoretical underpinning of their craft, and to achieve standing with subject specialists within their own institution and with those who count within the validating bodies.

The upsurge of ethnicity, its diversity and its immediacy, initially took many within education departments by surprise. Through their teaching experience and expertise they knew in principle what was involved, and, required, in terms of children's needs, classroom management, and curriculum reform. The sad fact is that, as a body, with honourable exceptions, they have chosen not to adapt their experience and expertise to the changing situation, but to find plausible reasons for not doing so.

Those who have spent long years in teacher training will have encountered skilled creators of smoke-screens. "It would be inopportune in initial training to highlight racial issues," they will increase. Let matters take their course. Presumably National Front skinheads, attacks on teachers in school and Brixton riots are all manifestations of such gradualism. "We are already mentioning the ethnic minorities at the appropriate places," in our developmental psychology and sociology of education studies. But so little seems to rub off onto the students. "The syllabus is already overloaded. Where could we find a spot?" The concept of a "spot" speaks volumes. "We cannot hope to anticipate local situations. These are best tackled through in-service education." This buck-must surely be due for retirement — it has been passed for so long. "We'd never get multi-cultural education through the validating body — let alone our academic board." There would seem to be two formidable hurdles

A cursory glance around the college common room will reveal that a number of the trainers are, in the words of Dylan Thomas, no longer "... young and easy under the apple boughs." Through no fault of its own, teacher training has become static, little disturbed by the appointment of younger staff with fresh impulses. "It frankly would kill me to go back to a down-town comprehensive full-time," confessed one lecturer with the confident candour of established seniority. "When the going gets rough," declared one teacher in such a school during a Rampton committee visit, "many tutors just do not want to know. I'm expected to pick up the pieces."

At a time when some in high places are advocating a first-degree followed by a post-graduate certificate as the most desirable way to structure our teacher training, the widespread lack of response from the university departments of education towards multi-cultural studies is all the more depressing.

It would, however, be both inaccurate and misleading to present a picture of universal blackness. There are touches of *chiaroscuro*. In perhaps half of the institutions, individual tutors, or small groups of staff have established optional studies in such areas as world religions, Caribbean literature, English as a second language or the multi-racial classroom; in such related fields as urban education, youth and community studies or linking home and school. Former students have spoken appreciatively of these courses whilst regretting that they remained on the periphery of their total work.

A small number of institutions has striven consistently over the years to develop a receptive climate of opinion among staff and students. Perhaps the one most significant feature of these endeavours has been the attack on many fronts. This might take place through elements in first-degree courses, other than those for the BED, as, for example, in West African literature, human geography or community relations. Studies might well exist in language and reading skills, the needs of both gifted and retarded children, linking home and school, collaborating with the social and welfare services. In such institutions, there are often flourishing community involvement, overseas exchanges, summer camps and well established in-service work, both short-term and in depth. In these the students' union develops both complementary and supportive policies of its own. The academic board has well established sub-committees and working groups through which it revises its policies, allocates its resources and promotes staff development.

Only those with rose-coloured vision would maintain that all was plain sailing in such institutions. On the contrary, there is nothing permanent about these advances. They are usually won with difficulty and maintained in the teeth of fiercely contended interests. But there are encouraging features. To cite but three examples: In one polytechnic a BED has been established in multi-cultural studies to match its complementary in-service degree. In a college the



academic board has undertaken a thorough appraisal of the contribution which the institution is making, through all its activities, both on and outside the campus, towards multi-cultural education. Another has, since 1971, structured its post-graduate course towards the multi-racial classroom and has, year by year, attracted graduates of quality from many higher education institutions.

Nevertheless it is not surprising that the interim report concludes that: "No teacher training institution appears to have succeeded in providing a satisfactory grounding in multi-cultural education for all of its students."

This is perhaps to be expected, given the dominance of academic studies in education and other disciplines, over the professional. This has deepened, but narrowed the specialised focus and led to a loss of overall perspective. Increasingly during the last decade a feeling for the seminal priorities which might underlie a training course has been deadened. Among these, belonging the development of a cohesive philosophy and practice of education, consonant with the needs of our contemporary society. This would include an examination of the place in that society of those areas where a coloured face is rarely seen. No institution, even the more enlightened, has made any significant contribution to this wider field.

The report hopes that the institutions will "consider ways of promoting a basic understanding of the concept and practice of a multi-cultural approach to education among all students and staff." The words were carefully chosen. "All students and staff" includes those in top and middle management, as well as those who exercise authority within a student body. "Knowledge" about ethnic minorities, whilst useful, would be inadequate without "understanding," since the former does not presuppose the latter.

This brings this survey to the last, and perhaps most important point: Those who have worked as short-term specialists for the British Council in the Third World know that at the end of the contract

they can withdraw from the harsh realities around them. Their involvement is both partial and temporary. In one sense, the initial training course is a kind of short tour, with the institution as the escape base. It is a period of shadow boxing during which students and staff are barely exposed to the test of sustained contact with, for example, adolescent West Indians, both within and outside the school. Such contact could drain their emotional resources and stretch their racial tolerance to the limit.

There is certainly one exception. Since 1973, one college has set up, far from its main campus, an urban studies centre in the East End of London. Here some of its BED and PGCE students spend 15 weeks and others up to five months. During this time they teach for three days a week in a local multi-racial school and for the other two they are engaged wherever possible, in school-related work, in social or community work. As an external examiner, I have seen some of these students in action and witnessed the resilience and the growth of awareness shown by virtually everyone. Many of the former students who stayed at the centre are now teaching in the area. This is perhaps the most thorough attempt to date to ensure deeper terms with attitude, both in this field, among both staff and students.

This section of the report is trying to say to the teacher training institutions: "You have made too little impact, during the past 15 years, on race relations. Teachers, advisers and parents have little confidence at present in your ability or willingness to improve this impact. For goodness sake harness your professional resources and prove them wrong!"

Ken Millins was chairman of the Teacher Education Sub-committee of the Rampton and is a former director of Edge Hill College of Higher Education. He has also chaired the teacher training panels of the National Committee for Commonwealth Immigrants and the Community Relations Commission.

Pay body seat for poly union angers grass-roots group

Tory attack on Carlisle

by David Lister

The announcement this week that Mr Mark Carlisle, the Education Secretary, is considering giving the Association of Polytechnic Teachers a place on the Burnham FE committee which negotiates pay has been attacked by the Conservative Party's own education committee. Mr Dmitry Argyropoulos, chairman of the Tory grass-roots organization, the National Advisory Committee on Education said: "I think that good industrial relations are best served by a small number of large unions and not by lots of small ones. I know Mr Carlisle faces a great deal of pressure from Parliamentary colleagues but I can't help but note that these Conservatives who have to actually deal

with the consequence of this change are against it. I refer to the Conservatives in senior positions in NATFHE and the leaders from the education committees of the ACC and AMA. These people are far better informed than most MPs."

Mr Peter Dawson, general secretary of NATFHE also condemned the proposal. He said that to grant representation to a body which only claims 2750 members could only be seen as a "wrecking move".

Mr Carlisle is to consult the teacher organizations already represented on the committee before taking a firm decision.

Universities 'must stand by offers'

by Biddy Passmore

Universities were contractually bound to students with conditional offers of places for this autumn, Mr Laurie Sapper, general secretary of the Association of University Teachers, said this week.

He was commenting on advice contained in a recent letter to universities from Dr Edward Parkes, chairman of the University Grants Committee. This said universities should not complete their admissions process until they had heard what their grant was for next year, in case they could not provide the course for which students had been accepted.

The UGC letters setting out each university's grant allocation and ways of meeting 1983-84 are to be sent out this week. They are likely to be less than was previously assumed and will apparently give each institution next January to consider the committee's recommendations.

However, each will for the first time be a target of student numbers for 1984 split up into subject areas but not individual departments.

Mr Sapper said he imagined the universities and on universities with a "bald head" he had been told there would be no financial penalties for institutions that did not obey the UGC's recommendations, he said. He had earlier launched an attack on Dr Robert Boyson, the minister responsible for higher education, accusing him of "hoodwinking" the public by spreading half truths and misrepresentations about the universities.

Now Staffordshire threatens compulsory redundancies

by Richard Garner

Union-controlled Staffordshire County Council this week became the first authority to threaten to make teachers compulsorily redundant since the announcement by Mr Michael Heseltine, the Environment Secretary, that he will penalize local authorities which have overspent. The council was warned that 45 teachers face the axe at the end of this term.

The announcement has shocked and angered "teachers' leaders" who said they had an agreement with the previous Conservative administration in Staffordshire that the axing of more than 400 teaching posts in the county would be carried out through management, and premature retirement.

The plans hit any ariels, they said, the Conservatives had promised to consult teachers again before resorting to compulsory redundancies. However, in an education committee meeting on Monday, Mr Bob Cant, the council's chairman of the education committee, revealed that the county council was still 120 short of the 400 teaching posts it planned to cut at the end of term. It was estimated that another 45 would be found by the end of the year and that 30 would be found by the end of the year. The other 45 would be found by the end of the year.

Mr Cant said that the council was now in a position to make the redundancies.



Mr Sapper: no penalties

Dr Boyson claimed the universities had to be recast because of the dramatic decline in the 18-year-old population, Mr Sapper said. But the figures showed that, although the number of 18-year-olds would peak in 1983, there would still be 25 per cent more in the 1980s than in the past decade.

While the minister said the staff-student ratio in British universities was about twice as favourable as in Harvard and Yale, it was in fact 1:10 here, compared with 1:9 at Yale and 1:12 at Harvard.

Dr Boyson had complained about tenure for university teachers. Yet in practice most public servants had just the same kind of tenure till retirement. Finally, Dr Boyson was trying to give the impression that the universities were only suffering a 3-3½ per cent cut this year. Yet the combined impact of the cut in grant and loss of income from the decline in overseas student numbers — expected to be about 20 per cent this year — would bring that figure up to nearly 10 per cent or £120m.

Fuel-saving system can take the heat out of caretaking

by Sarah Bayliss

A fuel-saving heating control system — also said to conserve the energy of caretakers — is being pioneered in schools in Hereford and Worcester.

The scheme, which it is claimed will cover costs within three years, uses mini-computers to monitor classroom temperatures and to turn boilers up or down, on or off. 65°F is the "target" temperature for the schools.

It is part of a county-wide scheme to knock £1m a year off the council's total fuel bill. Each school's heating bill is reckoned to drop by 15 per cent.

Transmition, the British-based company with the Hereford and Worcester contract, says the Department of Energy estimates £100m could be saved annually if every education department adopted similar systems.

The company is already responsible for controlling temperatures in Sheffield Town Hall, Nottingham University, several British Leyland factories and some hospitals.

So far two schools in Hereford and Worcester have a system installed.

There are heat sensors in parts of the buildings which, according to the publicity handout, take account of "unpredictable heat sources, for example, the sun, human bodies and light fittings."

Through a "black box" micro-processor in each school information is relayed to a computer at the county council's offices in Worcester.

The Department of Energy has agreed to pay a 25 per cent grant for installations in the first 50 schools. The county intends 100 to be linked in to the central computer.

It is said to allow individual radiators to turn themselves off, to make routine maintenance unnecessary and to spot faults quickly.

A spokesman from Transmition said fuel savings were the main requirement — caretakers' jobs were not going to be saved. "It's true it takes the drudgery out of a caretaker's day," he said. "They don't have to go walk round with thermometers any more, turning things on and off."

Labour surveys private sector

Labour Party headquarters has issued advice to Labour groups in local authorities urging them to start identifying local private schools which could be integrated into the maintained system under a Labour Government.

It also reminds councillors of the party's opposition to the assisted places scheme and advises them of ways of undermining it, such as refusing permission for 16-year-olds to transfer from maintained to private schools.

The advice note is one of the three issued by the party's national executive committee. A second urges Labour-controlled authorities to abolish immediately corporal punishment in primary and special schools and to set a date for its abolition in secondary schools. The third, on school governors, says power on governing bodies should be shared equally among i.e.a. appointees, staff, parents and pupils and community representatives, as the Taylor Report recommended.

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City and Guilds beat DES to the post 'Voc' 17-plus course will be launched this year

by Mark Jackson

The new 17-plus certificate for non-academic pupils proposed by the Government, the "Voc", is to be offered to schools and colleges for the coming year - more than two years ahead of the official plan.

Letters from the City and Guilds Institute went out to heads this week setting out the course and basis of assessment for the new award, the Certificate for Vocational Preparation (general).

The institute, which has pioneered the kind of work-related education which the Government wants to offer to the over-16s, says that the education service cannot afford to wait while the Department of Education tries to make up its mind over how the new courses should be run and assessed.

It agrees with the Further Education Unit that the first courses need to be run this year, and not wait until 1983-4, the date proposed by the DES. The department's senior officials and Ministers are still arguing about whether the courses should be tied firmly to occupational activities, as originally proposed, or allow a softer option of general industry studies for schools who fight shy of getting too involved with the world of work.

Because City and Guilds is closely linked to practical vocational education, some officials in DES schools branch who favour the general studies option have been advocating that the main job of validating the new course should be given to TEC and BEC

rather than the institute. The same officials want the certificate to be based on a formal terminal exam rather than assessment during the course.

The City and Guilds formula is a compromise: it provides for a profile for each student which is based generally on assessment, but with tests of proficiency in the three Rs set by the institute.

The course is built round the range of core skills defined in the Further Education Unit report *A basis for choice* on which the Government's own proposals are based, together with between three and five vocationally oriented options.

Mr Basil Henson, the controller of the institute's education department, said this week: "We are trying to meet an immediate need for vocational certification with some uniformity of approach. We have been collaborating with the Schools Council and the FEU on developing courses of this kind, and we hope to continue that cooperation."

Mr Henson denied that the institute was attempting to preempt the DES decisions, and insisted that the institute's action would be compatible with the arrangements which the department would eventually make. But it is clear that if City and Guilds succeeds in establishing its certificate as a recognised national vocational preparation award for 17-year-olds, the Government is going to find it difficult to prise its administration away from the institute, or to set up a rival certificate to be run by some other agency.

Head considers legal action over claims of beating

by Richard Garner

The headteacher of an Essex school is considering taking legal action over a claim by a pressure group that his school has the worst corporal punishment record in Britain.

Mr Roger Cryer, head of Elmbridge, a maintained boarding school in Ongar in Essex, said: "I feel I must, I shall be consulting with Essex County Council to see whether I or they should take some action. Since I took over as head of this school last year, only one boy has been caned."

Figures supplied to the Society of Teachers Opposed to Physical Punishment showed that a school of the same name, Elmbridge school in Cranleigh, Surrey - also a boarding school maintained by Essex County Council but which has now closed down - had recorded a total of 566 canings between September 1979 and July 1980 on just 200 boys.

Their press release says: "Elmbridge, although maintained by Essex, was sited at Cranleigh until recently but has now moved to Ongar, where it has amalgamated with another school."

However, both Mr Cryer and Essex County Council say that Elmbridge at Ongar is a new school - borne out of a reorganization of the county's boarding school facilities.

In its press release, STOPP revealed that it had written to Mr Mark Carlisle, the Education Secretary, asking for an inquiry into the corporal punishment record at Elmbridge.

Caning record at Merseyside school criticized

A Merseyside comprehensive's record of corporal punishment is strongly criticized in two confidential reports, it was revealed this week.

Some teachers at the school are "antagonistic" towards their pupils, says one report.

The school, Litherland High School in Sefton, first became the subject of controversy when Mr Alan Corkish, a teacher, leaked details of its corporal punishment record to the Society of Teachers Opposed to Physical Punishment. A total of 1,895 beatings had taken place at the school over a period of four terms according to the records.

An outcry followed, and senior education officials in Sefton carried out their own investigation into the "running" of the school. It was also revealed that the school had been the subject of an HMI report just before the corporal punishment record was made public.

Both reports criticize the frequency of corporal punishment. However, Mr Keith Robinson, the chief education officer, said this week that punishment procedures at the school had been

Parents buy in and out as they please

by Biddy Passmore

More and more parents are choosing education *à la carte*, moving their children in and out of the private sector as it suits their needs, Mrs Heather Brigstocke, president of the Girls' Schools Association, said this week.

This approach was taking over from the traditional way of saying, "Here's my boy - you can keep him from 7 to 18", she said. Today, for instance, parents might send their child to boarding school while they were abroad and then to the local comprehensive when they returned.

Mrs Brigstocke, who is High Mistress of St Paul's Girls' School, London, was attempting to explain at a press conference the slightly bewildering results of the latest census by the Independent Schools Information Service (ISIS).

This shows that, while overall numbers of pupils at private schools have risen by over 2,000 since last year, the

number in secondary schools has dropped. Numbers at boys' senior schools have fallen by 819 and by nearly 1,000 at girls' schools.

However, the numbers in prep schools have risen by nearly 4,000 to a new record level - and that increase includes an extra 500 boarders. Members of the Incorporated Association of Preparatory Schools (IAPS), which covers both boys' and girls' schools, now have 99,000 pupils, of whom less than a third are boarders.

The sharp rise in fees - the result of teachers' pay rises - is one of the main reasons for the drop in numbers. Fees are up 25 per cent on last year for senior boarders and now average £3,424 in boys' schools and £2,681 in girls' schools. Day fees in boys' senior schools are up from £1,200 last year to £1,423 (18.5 per cent) and in girls' schools from £1,034 to £1,219 (17.8 per cent).

Clash of views over allowances

by Sarah Bayliss

A Government circular which says councillors should stop being paid to go to school governors' meetings has prompted an angry response from the local authority associations.

However, the ruling, which is not legally binding on councils, could be overturned if allowances for all school governors are introduced in the future.

It is understood that a travel and subsistence allowance for school governors may be included in an Education Miscellaneous Provisions Bill, if Parliamentary time permits it to be introduced in the next session.

In the past, most school governors have been denied compensation for their work, time or travel. But members who are also councillors or co-opted members of councils have been eligible since the 1972 Local Government Act for an attendance allowance. Some councils pay no allowance at all. Those that do use the discretion allow up to £14 for a single meeting.

A Department of Environment circular issued in 1974 said that under the Act, attendance at governors' meetings was deemed to be "for the purposes of, or in connection with, the discharge of the functions of the local authority."

However Circular 16/81 issued last month by the Department of the Environment said the Act had been misinterpreted in the past and councillors were no longer considered eligible for attendance allowances.

"The fact that the DOE gave out opinion seven years ago and now, the same law, has given the opposite opinion suggests that the matter must be in profound doubt," said Mr Jack Springett, education officer of the Association of Metropolitan Authorities.

The AMA, which represents 36 big towns and cities running education services, is seeking council's opinion on the latest circular and, alongside the Association of County Councils, is disputing the matter at officer level.

Both associations say that as a result of the circular some councils have halted payments while others have continued, regardless. Government circulars are not legally binding.

The AMA and ACC would welcome a new approach to compensation for school governors, particularly since it would avoid the unfairness of the present system, whereby elected councillors receive something and the rest nothing.

It is understood that a travel and subsistence allowance, claimable by all school governors, was first suggested by the DES last summer in talks with the local authorities. The Taylor Report three years earlier had called for some compensation to be introduced.

The associations expressed approval of the plan last year. Now the DOE has indicated - in private - that the DES will pursue the idea through legislation as soon as there is an opportunity.



Baroness Phillips lends a helping hand in the launch of a new scheme to enable blind and other disabled people to go cycling. Initiated by the St Christopher Catholic Cycling Club and backed by money from the ILCA, charities and the Sports Council, the scheme uses sighted people to pilot hand-built tandems. On the "maiden voyage" in London are Natalie Wright and Tony Langan.

Let 15-year-olds go to college, say officials

A report just published says that 15-year-olds should be able to leave school to attend a further education college full-time.

At present, it says, local authorities turn a "Nelsonian eye" to the presence of pupils under 16 in tertiary colleges, or else retain them on the register of their schools while they are actually attending the college. But these irregular practices should be made legal.

The report, which has been previewed in *The TES*, is called *The Legal Basis of Further Education* and has been produced by a joint group of central and local government officials. The Government will now consult on its findings before producing its own legislative proposals.

It says that no fees should be charged for non-advanced courses for home students over compulsory school age who begin courses before their nineteenth birthday. This has been accepted practice in the past but some authorities are now departing from it under pressure of cuts.

Broadly, the report proposes the scrapping of present FE law and its replacement with a new legal framework. This would give each local education authority a duty to provide a suitable place for all 16-19-year-olds, but would not give the individual the right to insist on whether the place should be in school or in college. L.E.A.s would automatically be able to recoup the tuition fees of

FE students from a neighbouring authority.

Members of the group could not agree on whether the duty should extend to those over 19. That will be decided after consultation.

For handicapped young people who had been the subject of a statement under the new Special Education Bill while at school, the authority would be obliged to take account of its contents when providing a place for them. It would also be required to review their needs annually.

The new provisions regarding the availability of information on schools available should be extended to further education, says the report.

Union invitation causes a stir

A row has broken out in Gwent over the decision by the National Union of Teachers to invite Mrs Shirley Williams to address a course for teachers at Caerleon, near Newport, next month.

Mr Roy Hughes, Labour MP for Newport, today called for a re-think "even at this late stage".

He added: "Surely, there are plenty of able Labour Party spokesmen available to take her place."

Gwent is a county which is overwhelmingly Labour and at the recent county council elections, all other parties were just about annihilated.

A child is sometimes the most susceptible and vulnerable consumer of all. Which is why any advertising aimed at children needs tight control. Hence the rules on the right.

These are just some of the rules affecting children's advertising and they appear in a book called the British Code of Advertising Practice. In it are many rules, not just affecting children's advertising. They govern all advertisements which appear in the press, or in direct mail, in print, on posters and cinema commercials.

The Code is used by the Advertising Standards Authority whose job it is to protect the public from unacceptable advertising. (To help us interpret and develop the Code, we have recently carried out research into children's reactions to advertisements.)

Amongst other things, the ASA responds to consumers' complaints, and this briefly is the way the system works. Members of the public can write to us to complain about any advertisement they find unacceptable. If, after investigation, we find the advertisement contravenes the Code, we instruct the advertiser to amend or withdraw the advertisement.

Appendix B Children

- General
- 1.1 Direct appeals or exhortations to buy should not be made to children unless the product advertised is one likely to be of interest to them which they could reasonably be expected to afford for themselves.
 - 1.2 Advertisements should not encourage children to make themselves a nuisance to their parents, or anyone else, with the aim of persuading them to buy an advertised product.
 - 1.3 No advertisement should cause children to believe that they will be inferior to other children, or unpopular with them, if they do not buy a particular product, or have it bought for them.
 - 1.4 No advertisement for a commercial product should suggest to children that, if they do not buy it or encourage others to do so, they will be failing in their duty or lacking in loyalty.
 - 1.5 Advertisements addressed to children should make it easy for a child to judge the true size of a product (preferably by showing it in relation to some common object) and should take care to avoid any confusion between the characteristics of real-life articles and toy copies of them.
 - 1.6 Where the results obtainable by the use of a product are shown, these should not exaggerate what is attainable by an ordinary child.
 - 1.7 Advertisements addressed to children should where ever possible give the price of the advertised product.
- Safety
- 2.1 No advertisement, particularly for a collecting scheme, should encourage children to enter strange places or to converse with strangers in an effort to collect coupons, wrappers, labels or the like.
 - 2.2 Children should not appear to be unsupervised in street scenes unless they are obviously old enough to be responsible for their own safety; should not be shown playing in the road, unless it is clearly shown to be a play-street or other safe area; should not be shown stepping carelessly off the pavement or crossing the road without due care; in busy street scenes should be seen to use the zebra crossings when crossing the road; and should be otherwise seen in general, as pedestrians or cyclists, to behave in accordance with the Highway Code.

- 2.3 Children should not be shown in windows or on the street.
- 2.4 Small children or reaching up.
- 2.5 Medicines, drugs should not be shown in a parental aspect.
- 2.6 Children should not be shown using paraffin, petrol, or other flammable liquids.
- 2.7 Children should not be shown in the vicinity of machinery (in order to encourage safety and welfare).
- 2.8 An open fire should always have the scene.

If you would like to know more about the Code on advertisements addressed to children, or about us, or if you have any cause to complain about an advertisement, we'd like to hear from you.

If an advertiser breaks one of the rules, we won't let him get off lightly.

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Centre of excellence: Chelsea College centre for science and maths education

Chelsea College faces 'phasing out'. Biddy Passmore reports

Slurred, shamed, sentenced

There is a security guard at the gates of the huge Marjonn site of Chelsea College, London University. Wags say he is there to keep out Lord Annan, the university's vice-chancellor, and Sir Peter Swinnerton-Dyer.

Sir Peter, vice-chancellor of Cambridge, is the chairman of the University Committee on Academic Organization, a body set up by Lord Annan to find ways of pruning London's 16 non-medical schools in the face of a £100m deficit, published a month ago, had worrying things to say about five of the colleges. But it reserved its harshest criticism for Chelsea College.

It said: "Chelsea is highly regarded in some areas - for example science education, nursing, and history and philosophy of science - and these groups should be preserved. But we are not confident that the same can be said of the rest of Chelsea. We recommend that there should be a peer review of all the departments at Chelsea, except the three we have named above, with a view to phasing out those which do not come up to the standard of the rest of the university. This might leave a coherent school, though probably one that would fit onto a single site. . . . But if the departments which survived this review were no longer enough to constitute an independent school, then it would be necessary to incorporate each of them into another school of the university. (For each of the three we have named, we can see at least one plausible new host) . . ."

Staff and students at the college are angry at these slurs. Dr Charles Phelps, the principal, has called the document "vicious" and "cruel" and has written a tart letter to Lord Annan urging him to take no notice of it when it comes to sharing out next year's grant. He has also confronted the vice-chancellor, the person about whom the estimated loss of £100m in research grants for Chelsea since the report was published.

The students' union, meanwhile, has written to Sir Peter: "If we have been examined, we have been examined very cursorily," said Mr Jake Kirkwood, union president.

That is what really galls the college: the speed and - in its eyes - superficiality of the judgments reached by Swinnerton-Dyer. "Observations off the top of their heads," commented Lord Wolfenden, president of the college, this week.

The committee's report admits quite openly that it did not have time to embark on the best method of assessing research excellence: peer review, which means asking a few experts for their assessment of a person or department. It was thus forced to rely on "the general reputation of departments and the individual judgment of members of

the committee".

But that, says Dr Phelps, does not justify the brief nature of the committee's inquiries: a 40 minute interview between two committee members and the college's acting principal, followed by a 40 minute high-speed visit to the Marjonn site.

"They saw nothing of the life and work of the departments inside this college", Dr Phelps complains. And his own meeting with the committee in May this year, must have come far too late, he feels.

College staff do not dispute that the three areas singled out for praise by Swinnerton-Dyer are jewels in the college's crown. Two of them - science education and nursing - had already been praised when it visited the college in 1978. They do feel, however, that other departments of an equally high standard have simply been ignored.

What about electronics, where a professor from the world-famous Massachusetts Institute of Technology was recently appointed to a chair? What about pharmacy, where there are 12 applications per place? And what about

Five under threat

A question mark now hangs over the future of five of London University's colleges after the publication last month of the second "discussion document" from the Swinnerton-Dyer Committee on Academic Organization. They are Bedford, Westfield, Royal Holloway, Queen Elizabeth and Chelsea. The fate of three others - the School of Pharmacy, the Institute of Education and Wyke College - will be discussed in the committee's final report in the autumn.

The committee, originally set up to examine ways of coping with a drastic fall in the number of overseas students - has had to accelerate its work to respond to the latest government cut of 8 per cent in university income by 1983-84.

As the university awaits notification of its grant and future student numbers from the University Grants Committee, it is still torn over the comments and recommendations in the Swinnerton-Dyer report. The University Court must make the same decision for London as the UGC has done for the country, whether to cut selectively as Swinnerton-Dyer recommends, or to implement an across-the-board cut.

At present, it looks as though selective cuts - with an end to teaching on at least one major site - will be implemented. But there have been many reports, chiefly from Swinnerton-Dyer's report, chiefly for the bias in its membership towards the largest colleges.

out the fact that Chelsea is the university's second largest provider of part-time education, thought to be a vital area in Birkbeck's case yet ignored in Chelsea's?

More important, they feel that Swinnerton-Dyer has failed to recognize that the college is a close-knit structure.

Professor Paul Black, head of the famous centre for science and mathematics education, puts it like this: "It's not an accident that this is a splendid place. Maths and science education, history and philosophy of science, nursing - these are all new developments initiated by Chelsea College. Others could have done it and they didn't. What's proposed is that those who fathered us can be got rid of and we can be stuck somewhere else."

Professor Black knows that his centre will not die. It specializes in areas of education popular with this Government and where there is a national shortage of teachers.

About three-quarters of the £114m in research funds the centre has won over the last five years have come from the Government. It does all the nationwide monitoring of 11 and 13-year-olds in science on behalf of the Assessment of Performance Unit. It has a big programme on computer-assisted learning. "Even if the university did decide to close us down, the DES wouldn't let them!", says Professor Black.

But where could it be moved to? It is generally agreed among college staff that the centre's "plausible new host" must be the Institute of Education. Professor Black would not comment on that possibility but he did say that there must be three conditions attached to any "grafting on": the centre must stay self-contained, so that it could give priority to maths and science; it must have strong academic links with other disciplines outside education, particularly, but not exclusively, science and maths; and it must join a school where it would be a welcome and valued part of the total institution.

That seems to rule out the Institute of Education - and almost every other college but Chelsea.

Chelsea is now asking for a rerun of the whole rationalization exercise, with a proper peer review of all the university schools. "Hailing that," Dr Phelps would prefer to see an across-the-board cut of 15 per cent to the implementation of Swinnerton-Dyer's recommendations.

"We could cope with a 15 per cent cut," he says. "We have looked very hard at ways we could save, through building rationalization and early retirement plans, where our age structure is favourable. And that's merely slanting the money flow - we could also earn money."

Government cash limits expected to hinder cost of living pay rises

by Richard Garner

Negotiations for a cost of living pay rise for more than 100,000 teachers living in and around London may run into difficulties next month.

Local education authorities have warned that they cannot promise to pay the increases in the London allowance automatically this year - as they have done in the past.

The two sides will meet next month, armed with the latest figures from the *Employment Gazette* which are expected to show a 12 per cent rise in the cost of living in London.

At present, teachers receive £759 a year extra if they work in Inner London, £498 for outer London and £213 for the fringe areas in the Home Counties. A 12 per cent rise in allowances would cost just over £62m.

The local authorities have warned that they cannot afford to pay the full increase because of strict cash limits imposed by central government.

In the past, the allowance has always been updated to allow for increases unless pay policies have prevented this. Teachers' leaders are extremely reluctant to abandon this principle.

In previous years the claim has often

gone to arbitration but now, under rules governing teachers' pay negotiations, it can only be settled by mutual agreement.

Meanwhile, broad agreement has been reached by the unions and the objectives they will seek from negotiations to start in the autumn on restricting teachers' pay.

Union representatives, meeting Friday, agreed it was essential to secure more promotion opportunities for schools to combat the stagnation in the profession brought about by falling rolls. In addition, they want to make the number of different groups and pay scales for head teachers and deputies.

The National Union of Teachers put forward a plan for automatic progression through the pay scale from the lowest entry point - the teachers currently earn £4,634 a year to the top of scale two, currently earning £8,208 a year. The National Association of Schoolmasters/Union of Women Teachers also favours automatic progression from the lowest pay scale to the bottom of scale two in five years.

New grammar book ready by 1982

A new English grammar primarily for use in schools is being sponsored by the English Association and will be ready by early next year.

This was reported by Professor Ted Dorsch, the association's chairman, at the annual general meeting in St Ermin's Hotel, London, on Saturday.

The grammar has been edited by Professor Geoffrey Leech of Lancaster University.

There is a growing need for such a work, an association spokesman said, to meet the reviving interest in English grammar after "a period of neglect."

Working present for the wedding

Great Manchester council will fund engineering apprenticeships for three unemployed teenagers as a wedding present for Prince Charles and Lady Diana Spencer.

The Association of County Councils is sending a specially designed service, said to cost £1000, to the Royal couple.

Plea to Lords over rights of parents

The Advisory Centre for Education is calling for more rights for parents of handicapped children.

The pressure group has appealed to the House of Lords to amend the special education Bill, based on the Warnock report's recommendations for educating the handicapped. The Bill came before the Lords this week.

ACE wants parental access to records and reports and the right to challenge inaccuracies in them and a better appeals system for parents.

World citizenship exhibition opens

An exhibition about the work of the Council for Education in World Citizenship opened this week in the foyer of the TUC's Congress House in Great Russell Street, London. It will remain open until July 10 on Mondays to Fridays from 9.30am until 5.30pm.

New course for training of handicapped

Manchester University has launched a new course to meet the crucial need for training staff to help handicapped people - the first course in the country. The two-year course - announced last week - is based in Stockport College of Technology and will lead to a certificate in the Further Education and Training of Mentally Handicapped People. It will be validated by Manchester University.

Tour licence plan is rejected

The Government has rejected a request to provide greater protection for schools in the event of tour operators collapsing and throwing holidays into jeopardy.

The National Association of Head Teachers had urged Mr. John Gummer, Minister for Consumer Affairs, to set up a licensing system for tour operators and compel them to take out insurance against financial collapse.

Their request had followed the official winding up of the Luton-based firm of Draper Travel Services Ltd and the investigation by the Official Receiver into its affairs and those of its two subsidiaries, School Quest and Draper School Travel Services.

In her reply, Mrs. Oppenheim said: "On the evidence to hand, I am not convinced that there is a case for further government intervention in this field." She says, however, that she sympathizes with the children who lost their holidays because of the collapse.

Mrs. Oppenheim says that the Association of British Travel Agents, which guarantees financial security, is "presently capable of dealing with school parties of any size and that many of their retail agents are prepared to negotiate arrangements with schools in their local area."

Mr. David Hart, general secretary of the NAHT, has now written back to Mrs. Oppenheim, saying he is "far from convinced" that present cover arrangements are adequate.

He urges the Government to consider the licensing scheme idea again, adding: "The lack of such an alternative form of protection means that the travel industry is moving inexorably towards a monopoly position, where only ABTA-registered organizations can operate and then only under ABTA-determined procedures with the inherent risk of cartel arrangements, etc."



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Race group says Reading's minorities end up in weak schools

Policy of 'inequality'

by Diane Spencer

Reading, in Berkshire, is suffering from a massively unequal and discriminatory education system, according to a report by the local community relations council.

The report calls for a change in the way children are allocated to secondary schools because, it claims, the present system is unfair.

The report, as yet unpublished, reveals that in 1980, 50 per cent of Asian children and 40 per cent of West Indian children needed remedial help at 11-plus, and 75 per cent of both groups were below the national average on transfer to Reading comprehensive schools.

Because of a zoning system set up in 1978, these children are distributed into weak schools affected by falling rolls.

Out of the 17 schools in the greater Reading area, 12 are near or above the national average of attainment and five are below. Eighty per cent of Asian children, 51 per cent of West Indian children and 20 per cent of white children are located in the five weak schools.

Only one of the eight comprehensives in the former town boundary had an intake in 1979 which reached the national average, two were well below and three were substantially below.

But in the area immediately surrounding the old city boundary none of the seven comprehensives fell below the national average, and most of the others were substantially above it. The

old boundary has been adhered to by the authority despite the town's merger with Berkshire under local government reorganization in 1974.

Ethnic minority pupils are concentrated mainly in the schools which have the lowest attainment profiles although there is no evidence to show their presence contributes to this. The Reading Council for Racial Equality claims that this concentration is not accidental, but the result of deliberate policies and action by the county council.

A controversial zoning scheme, introduced in 1978, caused such an uproar that it was modified but not before the Commission for Racial Equality began its first formal investigation of an education authority following allegations of discrimination.

The commission's report has yet to be published but its main finding that discrimination was "not proven" was reported in *The TES* last week.

The Reading CRE's report re-examines a report published by a working party of head teachers in April 1980 on the outcome of the new zoning scheme and transfer arrangements to secondary schools which came into effect in 1979. It also updates the heads' figures for the 1980 intake.

The head's report appeared to preempt the CRE's investigation. The authority interpreted the head teachers' report as having refuted allegations that ethnic minorities were disadvantaged by the town's allocation

system. The report recommended that the authority should continue with the 1978 scheme in the interests of stability.

But upon closer examination of the head teachers' evidence, the RCER discovered it had unwittingly revealed the alarming state of schools in the town with major deficiencies in educational standards and enormous contrasts between schools.

The RCER says these facts cannot simply be explained by social disadvantage and urban deprivation. A recent survey of local authorities by the Office of Population Census showed that Reading, along with Cheltenham, York and Brighton are the towns that deviate least from the national average of a set of 40 census variables.

The report recommends:

- a detailed examination of primary schools
- more funds for the English language centre, and primary schools with remedial children
- monitoring the progress of children throughout their school career
- implementation of a comprehensive system with a proper spread of ability

Mr Peter Edwards, Berkshire's director of education, said this week that he had discussed the report with the RCER but "we are waiting for the objective report from the CRE in London before I make any comment on it."

Whitehall's method for assessing how much each local authority needs to spend on education - so grants can be distributed according to measured needs - is being refined but "is here to stay", said a top finance official last week.

Addressing a seminar of about 50 local government officers on the block grant and its implications for education, Mr Richard Jameson, accountant general and head of finance branch at the Department of Education, said the grant related expenditure assessments (GRES) for education authorities had already proved reasonably accurate on one count, but they were being improved.

Speaking at the Institute of Local Government Studies (INLOGOV) at the University of Birmingham, Mr Jameson said that in theory education GRES should add up to the Government's total planned level of spending in the White Paper.

In practice, recent figures had shown that authorities were indeed planning to spend only slightly more than the GRES and White Paper total.

The three counties - for whom education is the dominant service - planned to spend less than 1 per cent over their combined GRES; metropolitan districts were about 5 per cent over and the London boroughs were 10 per cent over.

"It does not seem that the introduction of the new grant system has seriously changed the important relationship between central government, plans and local government performance," he said.

About £800m was allocated to education on the basis of numbers of children in each authority. But between £40m and £60m was distributed according to special circumstances and to a handful of authorities this distribution was very important.

Mr Michael Heseltine, the Environment Secretary, is directly responsible for some steep rate rises, according to Professor John Stewart, the director of INLOGOV.

Many authorities had increased rates to protect themselves against the minister's threats to take away grant support from so-called "overpenders" and would continue to do so. "If you create uncertainty then you produce irresponsibility," Professor Stewart said.

In January, when Mr Heseltine sent out a circular describing a new target for local government with the implication that councils would lose grant if they overshot it, some county treasurers promptly recommended a higher rate increase for the spring budget, he told the seminar.

That target, which said spending in 1981-82 must be 5.6 per cent less than in 1978-79, was now being strictly applied by Whitehall and would produce supplementary rates. There was the additional threat that legislation to curb supplementary rates and subsequently to reform the whole rating



Mr Geoffrey Lockwood, registrar and secretary of Sussex University, signs his own degree certificate in preparation for next month's graduation ceremony, at which he will be awarded a PhD for a thesis on the management of universities. Under the university's Royal Charter, he is the only person authorised to sign the certificate.

Block grant proves its worth, says finance chief

by Sarah Bayliss

Whitehall's method for assessing how much each local authority needs to spend on education - so grants can be distributed according to measured needs - is being refined but "is here to stay", said a top finance official last week.

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Many authorities had increased rates to protect themselves against the minister's threats to take away grant support from so-called "overpenders" and would continue to do so. "If you create uncertainty then you produce irresponsibility," Professor Stewart said.

In January, when Mr Heseltine sent out a circular describing a new target for local government with the implication that councils would lose grant if they overshot it, some county treasurers promptly recommended a higher rate increase for the spring budget, he told the seminar.

That target, which said spending in 1981-82 must be 5.6 per cent less than in 1978-79, was now being strictly applied by Whitehall and would produce supplementary rates. There was the additional threat that legislation to curb supplementary rates and subsequently to reform the whole rating

The Grants Working Group - made up of local and central government officials - was responsible for discussing changes in the GRES but the Government would make the final decisions in the autumn.

Some factors were under special scrutiny. For example the current GRES took no account of the real size of debt charges. Only an average of debts had been calculated with an amount per pupil allocated. But councils whose pupil numbers had recently grown and which had built new schools, faced enormous debt charges.

In assessing the need to spend on primary and secondary education, a number of special factors had been identified which accrued more grant.

The Inner London Education Authority and Norfolk County Council were at two extremes, and understandably so, given their very different populations.

The ILEA wanted heavier weighting for its special problems - such as the high proportion of black children and children receiving free school meals. "Norfolk doesn't have many identifiable special needs children but through its rural nature and low income levels clearly has problems."

Mr Roy Harding, chief education officer for Buckinghamshire made a special plea for more research and described some of the problems in GRES.

The head count of school pupils was not as simple as it appeared. The Government had used figures that were two years old by the time grant was allocated. This helped cushion the effect of falling rolls.

But in parts of Buckinghamshire, pupils numbers were rising and the two year time lag meant a lower grant.

Heseltine blamed for rises

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system, was in the offing. Describing the spiralling costs in which local government found itself, Professor Stewart said Mr Heseltine had done what a politician should never do. He had taken a decision on a particular authority and when they refused to toe the line, he was deemed to have failed the public and his cabinet colleagues. His measures would get more and more extreme.

A draft version of the Green Paper on local government finance reform is already circulating in Whitehall. There are at least four alternatives to the present rating system, discussed in it: a local income tax; a sales tax; a poll tax and finally a centralized system of funding with all local government paid for by Whitehall and thereby very tightly controlled.

A poll tax - which would use electoral registers to charge each individual a set amount for local services, is said to be Mr Heseltine's favourite option. But the Home Office is opposed to this use of voting registers.

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SAT. 27 JUNE

2ND XI
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T. SALE.
S. GUTHRIE
S. COLLIER
D. BOWKITT
F. BOYDOTT JR.
W. WILLIAMS
T. LIPTON
S. OAKLEY
D. LILLIE
B. TAMES
SUB
A.N. OTHER.

1ST XI
SAT. 27 JUNE
11.00 AM PROMPT.

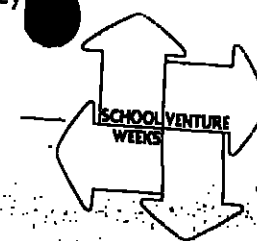


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Flora
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Hill Walking

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Horse Riding
Initiative Tests
Judo
Local Studies
Map Reading
Mini Rugby
Mutual Understanding
Nature Studies
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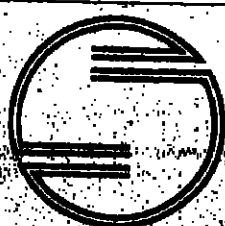
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United States/Clive Cookson

Foreign students pour into USA but government support declines

WASHINGTON: American colleges and universities have been attracting students from abroad at an ever-increasing rate for the past 15 years. Their total foreign enrolment — only 82,000 in 1964/5 — was 286,000 in 1979/80, the last year for which figures are available, and is expected to surge past 100,000 in the autumn.

Yet the last 15 years have also seen a steady decline in American government expenditure on international educational exchanges. The United States now supports fewer overseas students than most of its western allies and its rivals in the Soviet bloc.

The fact that more and more foreign students are pouring into the United States with less and less financial encouragement from the Government is, in a sense, a triumph for the country's educational free market. Clearly, hundreds of thousands of young people around the world are determined to study at an American university and they are prepared to pay a high price for the privilege.

Fees, including tuition, room and board, inevitably add up to several thousand dollars a year and they can run well into five figures at private research universities like Stanford, Harvard and the Massachusetts Institute of Technology.

According to the latest annual census of foreign students in the United States, conducted by the Institute of

International Education, 65.4 per cent relied primarily on personal and family funds, another 16.0 per cent were supported by government and private sponsors in their own countries, college and university scholarships financed 3.2 per cent, while just 2.0 per cent relied on American government support.

Many of the country's educational associations are not content with the foreign students who have been driven to the United States by market forces. For they come overwhelmingly from relatively wealthy countries and prosperous family backgrounds.

Very few students from the poorest nations of the third world can afford to apply to an American institution, unless their parents are members of the ruling elite, instead they study in Europe or the Soviet Union.

Sixteen organizations from the American Council on Education to the Committee on Scholarly Communication with the People's Republic of China, have therefore formed a new lobbying coalition, the International Educational Exchange Liaison Group, to fight for new funds to reverse the "serious decline" in government support.

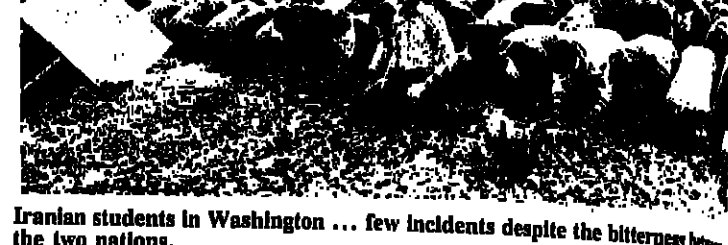
Its first policy statement is written in terms calculated to appeal to America's current political enthusiasm for beefing up its national defence. Educational exchanges are portrayed as one

of the "non-military aspects of our defence", whose expansion is necessary if the country is to increase its power and influence abroad.

"Both our allies and our adversaries seem fully mindful of the political and economic advantages that accrue when third world leaders are educated in their countries, are trained to utilize their technologies, and are participants in their social, political and cultural life," the liaison group says.

France and West Germany commit one per cent of their national budgets to international educational, cultural and informational activities, the United States only one-tenth of a per cent. Even Great Britain sponsors more of its students to go overseas and brings in more foreign students on grants than the United States.

The Soviet Union provides international scholarships on a scale several times more lavish than the United States. The Liaison group points out that 24,000 Africans study at its universities in 1977, while the United States sponsored only 1,800. "In Latin America, the USSR offered 4,650 study and training exchanges in 1978 while the United States Government offered far fewer than one-tenth that number in a hemisphere so close, so troubled and so important to our socio-economic goals and strategic thinking."



Iranian students in Washington ... few incidents despite the bitterness between the two nations.

The United States therefore has a disproportionate share of foreign students from the wealthier developing countries, especially the oil-producing states.

OPEC nations sent 100,000 students to American colleges and universities in 1979/80, compared to just 9,000 in 1964/5. The largest contingent from the industrialized west was Canadian (15,130), followed by 4,288 British students.

The number of students who come to the United States on Fulbright Scholarships, the Government's main vehicle for educational exchanges, is tiny compared to the number who make their own arrangements.

The Fulbright programme brings in only 1,700 postgraduate students (and 700 senior academics) a year; it also sends about 300 American students (and 500 senior scholars).

There is plenty of scope for America's huge and diverse system of higher education to absorb more students

from abroad. The present level of 300,000 sounds high but it represents only 2.5 per cent of the total enrolment of American colleges and universities. Even in California, whose foreign student population is already about 50,000 and growing fast, they have been absorbed easily — so far.

The 1979/80 Iranian hostage crisis proved that point. Considering the 50,000 Iranian students — by far the largest contingent from any single country — spent last year in the United States, at a time when the American people were nursing a bitter grudge against their nation, it is remarkable how few serious incidents occurred.

To make sure that the influx from abroad continues to proceed smoothly, the American Council on Education has set up a committee of 12 university leaders to recommend ways for institutions to deal with their foreign students. Accordingly to one estimate, they are likely to be educating 750,000 of them by the end of the century.

The Netherlands/John Richardson

Falling rolls demand flexiplans

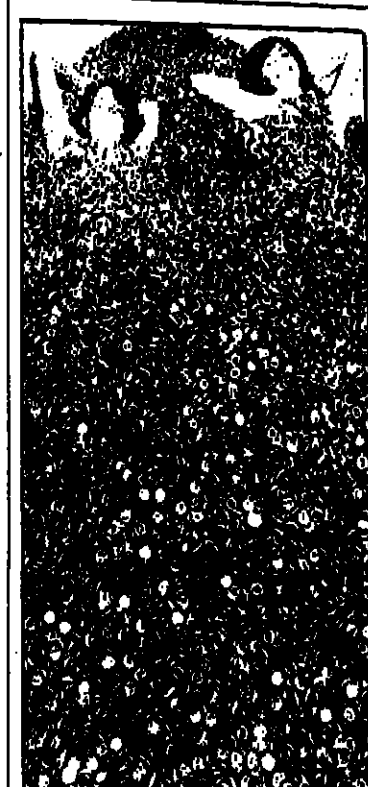
THE HAGUE: Flexible planning will be needed in order to maintain educational standards as rolls drop in The Netherlands' secondary schools, according to an important government discussion paper.

Between 1970 and 1980 the number of children born per year in the country dropped by 30 per cent. From next year this drop will begin to affect secondary schools, and by the mid-1980s it will have reached sixth forms and vocational colleges.

But this fall in rolls is happening at a time when crucial decisions still have to be made about the future of Dutch secondary education. Comprehensive have been experimented with, but the three-strand system of grammar, technical and general secondary school remains.

As rolls drop, increased linkages between schools will be needed, according to the paper published by Dr K. de Jong, state secretary responsible for secondary education in the Ministry of Education.

A wider sense of what constitutes a school will be needed. It may no longer be one building in one place, but an organization using a variety of resources, in different ways.



Imagine a million ... A Kentucky teacher wanted to show her class the size of the figure one million, so she suggested they collect bottle tops. Here two of her class recline among this collection, which so far stands at 812,392.

West Germany/Susannah Kirkman

Freedom complaint to go to Geneva

BONN: One of West Germany's largest teaching unions is to lodge a complaint at the International Labour Court in Geneva against what they consider official restriction of teachers' freedom of opinion.

According to the president of the Union for Education and Science (GEW), Herr Erich Frister, education officials are trying to encourage "good behaviour" in teachers by denying them permanent contracts or promotion if their actions bring them into conflict with the authorities.

Like other civil servants in West Germany, whose status and privileges they share, teachers must profess their loyalty to the free, democratic order. Members of the Communist Party, for instance, fall under the *Berufsverbot*: they are not allowed to become civil servants, which rules out teaching and the law, among other professions.

although some states are more liberal than others in their application of this rule.

The GEW has issued a 58-page document giving examples of "new political" cases: teachers, who have been disciplined, not for their communist affiliations, but for protesting against poor educational conditions such as large classes, either as private individuals, or as trade union officials.

A bizarre case of non-political disciplining came to light recently in Stuttgart, where the authorities withheld promotion from a teacher of German at a grammar school for quoting Heine.

Herr Erhard Jost announced his marriage by inserting the quotation, "the marriage is no less valid if the priestly blessing is missing", in the local paper. Angry parents complained that Herr Jost was "destroying the pupils' respect for God" in his lessons and the

authorities mounted an investigation into his teaching and political background, which led to disciplinary action.

As Herr Jost has pointed out, the poem from which the offending quotation was taken is on the sixth form German syllabus for most grammar schools.

Yet there are signs that the criteria for evaluating teachers are changing. The administrative appeal court in Berlin has just decided in favour of four teachers from Bavaria who had appealed against wrongful dismissal. They lost their jobs because, as students, they had participated in political groups which the Bavarian school authorities considered to have communist leanings.

The court emphasized that a teacher's "professional qualifications and personal aptitude" were more important considerations than his political past.

Adults flock to take up evening classes

Both the number of courses mounted by West Germany's 865 colleges of adult education, and the number of students who enrolled for them reached record levels in 1980.

The expansion of adult education has continued without a break for the past 15 years. During this time the number of courses on offer has increased from 73,000 to 280,000 and enrolments from 1.5m to almost 5m. To cope with the growth in demand 43 per cent of all colleges have appointed full-time directors and the largest centres have small teams of permanent staff responsible for groups of subjects and for supervising the work of the part-time teachers on whom the whole system is dependent.

Average class size has been reduced to 16, compared with 20 five years ago. Seventy six per cent of classes are held in the evening and only 19 per cent take place during the day. The remaining five per cent consist of special study programmes often involving field

work, visits and short intensive or residential courses lasting up to a week or ten days.

The *Volkshochschulen*, as the colleges are called, offer a wide variety of courses related mainly to leisure activities. Foreign language classes are by far the most popular and comprise 30 per cent of all students. Half of these are learning English and a quarter French. Currently, however, the highest growth rate is in German as a foreign language, as immigrant workers and their families come to recognize the importance of a working knowledge of the language.

Just under 20 per cent of students attend classes in creative arts subjects (pottery, woodwork, modelling, painting, music and dancing) with smaller proportions in keep fit, commercial skills, housekeeping, social studies and science courses.

At the bottom end of the scale 1.1 per cent of students prepare for the secondary modern, intermediate and

grammar school leaving certificates awarded by the ministry of education in each of the federal states.

Nevertheless, these courses account for nearly 10 per cent of the teaching hours given by the *Volkshochschulen*. In 1979-80 9,000 students took the school certificate examinations and a further 4,500 the examinations for trade qualifications, set by the chambers of crafts, commerce and industry. Few subjects in which public examinations are inappropriate, the Association of Adult Education Colleges in the Federal Republic has introduced its own certificate of achievement and in 1980 more than 10,000 students obtained such an award.

Only in preparatory courses for school-leaving certificates is there a slight preponderance of male students (54 per cent). Overall women outnumber men by roughly two in one.

David Dungworth

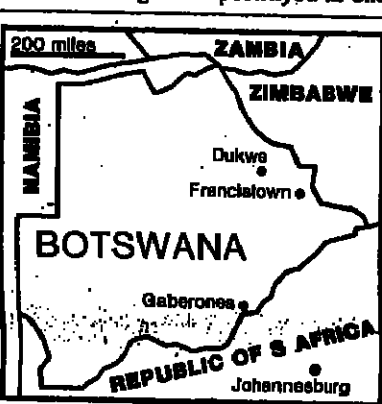
France/Barbara Cassassus

Teachers get a new leader

PARIS: M. Jacques Pommeau was last week elected the new secretary general of FEN, the dominantly socialist left-wing umbrella organization of 47 teachers' unions.

He succeeds André Henry, whose appointment as Minister of Free Time in Prime Minister Pierre Mauroy's socialist government received a mixed welcome in union circles. M. Pommeau, 48, is a former primary and junior secondary teachers' union which represents about 60 per cent of FEN's members.

On taking up his new post, M. Pommeau affirmed FEN's independence and determination "not to fall into the trap of co-management". FEN is already less euphoric than at the start of M. Mitterrand's presidency. It is disappointed with the new Government's first measures to help low paid public sector employees.



The remoteness of the camp at Dukwa (left) has led to deep resentment among its refugee inmates (right).

Botswana loses patience with exiles

Five years ago this month Soweto erupted in violence. Since then young black South Africans have been leaving their country in increasing numbers. Most make their way through the bush to neighbouring Botswana, a poor country which finds it hard to help the exiles with jobs, food and shelter, and which is finding these sophisticated and politically aware youngsters an increasing headache. Growing tensions, Glenn Masokoane writes, have led to drastic actions.

Botswana, the traditional escape route for young blacks leaving South Africa, has lost patience with the thousands of refugees under its care and protection.

Tension has been mounting for some years over living conditions, refugee rights and general welfare of the exiled young student community, which numbers just under 2,000. Many fled following the Soweto schoolchildren's riots of 1976, but there are also exiles from Namibia, Angola and Lesotho. Last year the refugees were moved away from the Botswana capital, Gaborone, to an inhospitable and malaria-infested resettlement camp 100 kilometres north-west of Francistown. Some refugees have been deported back to South Africa.

Dukwa was established in 1978 as a transit camp for 20,000 Zimbabwean refugees, all of whom have been repatriated since Zimbabwe's independence last year. The camp is run jointly by the Botswana Government, the United Nations High Commissioner for Refugees (UNHCR) and the Geneva-based Lutheran World Federation. But its agriculture-based resettlement programme has run into serious difficulties in trying to settle highly urbanized people in a remote urban area.

Given a choice, most refugees would

have liked to have been resettled near the towns, so that they could take up business projects such as the running of transport service — something they have already proved themselves good at.

Most students, however, want to continue their studies. Yet Botswana has a shortage of school places, and the strict quota system controlling entry to the University of Botswana, the country's only university, means that most refugees find themselves waiting for years before they find scholarship opportunities abroad.

The Botswana authorities argue that the forced removal of refugees was necessary because of escalating social problems in urban areas resulting from growing numbers of South African refugees without adequate housing or work.

But the clean-up operation of undesirable refugees needs to be seen also in terms of Botswana's economic dependence on the rich southern neighbour.

In the past South Africa is known to have applied pressure and even threatened Botswana for its anti-apartheid stance, even though Botswana has had a long-declared policy of limiting the political activities of refugees on its territory, and refusing to let its borders be used for guerrilla incursions into South Africa.

Within the country a series of incidents has heightened tension between the Government and the refugees. In 1977 the Botswana Government blamed South African black consciousness youth from Soweto for a university student demonstration, and since then it has accused them of interfering in the social, economic and political affairs of the country.

The situation has deteriorated since Botswana deported some South African refugees back into the hands of the South African police. Nineteen stu-

dents are said by refugee sources to have been sent back, although the Botswana Government says only four have been sent back, for unlawful activities.

The Botswana Minister of Information, Mr D. K. Kwaqabane, has said, "Some refugees have come to Botswana to create unnecessary problems rather than assist in the broad goal of eliminating the forces of tyranny and oppression." He further claimed that "certain South African refugees of questionable character and unlawful activities left Botswana voluntarily and resettled peacefully in South Africa, and this proved not all South African refugees are genuine refugees."

But secretary general of the South African Council of Churches, the Anglican Bishop Desmond Tutu, recently made an urgent appeal to the President of Botswana, Mr Q. K. J. Masire not to return South African refugees against their will, but to look for an alternative country of asylum.

The Botswana Government has now pledged its unchanged policy of granting political asylum to refugees from South Africa but an article in the government newspaper, the *Botswana Daily News*, added, "Those who become undesirable immigrants because of their criminal or unlawful activities would, however, be handed to UNHCR to find them a second country of asylum. When it failed then Botswana would have no other alternative but to return them to their country of origin."

About £50,000 is to be spent this year on housing and water facilities at Dukwa. But this will not ease the refugees' resentment at being resettled, or their fears that their being forced to live together in such a camp makes them highly vulnerable to attack by the South African security forces.

Poland/a special correspondent

Child addicts appeal for help

More than 1,500 Polish school children from 18 Warsaw schools have signed an appeal to the Government asking for help in combating drug addiction. In particular they are asking for rehabilitation centres and the banning of poppy cultivation.

This appeal, which the signatories say has the full backing of their headmasters and teachers, was published in the Warsaw daily *Ziemia Warszawska* only a few days after the Senate of Warsaw University had called for action by parents and teachers to stamp out heavy drinking among minors, including primary school children.

Alcohol abuse by schoolchildren has been an increasing problem in Poland for many years, in spite of an education for Temperance programme run by the National Anti-Alcoholism Committee.

In 1973, when a compulsory course in "Preparation for Socialist Family Life" was introduced in secondary schools, the syllabus was supposed to include a comprehensive discussion of all alcohol problems.

But at an international symposium in 1978, a representative of the MAC admitted that on this subject the existing textbooks were virtually useless, and most teachers had to fall in outside help.

Until recently, however, little was heard about drug abuse, which was dismissed as an essentially capitalist phenomenon.

During the last few months, however, several cases of convictions for manufacturing or pushing drugs have been given publicity. The children's letter, for the first time, reveals something of the extent of the problem. "Drugs," say the children, "are in common use in schools. Even 12-year-olds find it easy to obtain so-called 'stupeficients'. There is not a single school in Warsaw without at least one addict. 'Many thousands' of children do not know where to turn for help. 'We know that it is possible to cure someone who helps us,' they say. 'Unfortunately we do not know where to turn.'"

"We cannot rely on our teachers as they would expel us from school, our parents do not want to understand us, we are afraid of the police, but fear is not sufficient for a cure. We have heard that there will be new treatment centres set up one day. When will they be? We can't hold out much longer."

International/Hilary Wilco

Lead in petrol: more countries act

More countries are making moves to limit the lead content in petrol, following mounting fears that the absorption of lead into the body causes brain damage in children.

Next month Sweden brings in a reduction of the lead content of premium grade petrol to bring it into line with the limit of 0.15 grammes per litre already in force for regular grade petrol.

This is the same limit that the United Kingdom Government has

announced it will bring in by 1985. Denmark, Norway and Switzerland are planning to introduce this limit by 1983.

In the United States lead-free petrol was introduced in 1974. Since then all new cars have had to be designed to take lead-free fuel.

The European Commission is undertaking a four-year assessment of lead levels in the blood of sample groups in nine of the 10 member states.

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Letters

Labour Party's stance on provision for 16-19s

Sir, - Your comment column "Kinnock hits tertiary trouble" (June 12) was wrong in detail and assumption.

You report that our Labour Party 16-19 working group planned a "swift statement on tertiary colleges to preempt Macfarlane". There never was such a proposal. We did propose a brief document outlining the issues of 16-19 education and another in response to Macfarlane. The first was produced last autumn, the second was circulated at the Labour local government conference on February 13 which a couple of weeks of the publication of the Macfarlane report. Copies of both can be obtained from The Labour Party, 150 Walworth Road, London SE17.

The "more considered report" will be published in September. It never was intended to be a mere retort to Macfarlane. Its purpose is to provide a thorough description, analysis and set of proposals for consideration by the Labour movement. The date of its appearance is therefore not "odd". And the reasons which you offer for the absence of a document whose function you appear to have completely misconstrued have nothing to do with the working group being "bogged down" by "agonised lobbying" or "the headteacher voice" fighting a "rear-guard action" and much to do with consultation with a variety of educational authorities, institutions and organizations, the publication of relevant documents like the Manpower Services Commission *New Training Initiative* and the *MSC/AMA Youth Opportunities Programme* and L.E.A.s, the scope of a study which covers everything from youth employment to examination reform and, sadly, the state of the tertiary sector and my working group colleagues.

Many years when we published the "Majority" interest Sir, - The television programme *The Silent Majority* was a very worrying and upsetting programme and must have given rise to a great deal of concern. Unfortunately, the programme was

private schools document you refused to comprehend that the noun "discussion" has a literal and constitutional adjectival meaning derived from the verb transitive "to discuss" when applied to the publication of a Labour party working group report. I suppose that the misrepresentation of such a document as a conclusive policy statement provides better copy, whatever it does to accurate reporting. For the same reason, a fabricated tale of factional infighting occasions editorial comment that is more purple than anything that can be justified by the facts. Thus I am portrayed as a tertiary college fanatic defeated by compromise and my well-known hit man Phillip Whitehead has failed in his "express brief to knock the battling 16-19 working party into line". Murdoch will be proud of such masterful invention and sensationalist misreporting.

Of course, in Phillip Whitehead's words: "Adherents of sixth forms are passionate, so are advocates of college and tertiary systems". Who does not know that? My view is that current realities, future probabilities and the desire - or rather the duty - to make proper provision for 16-19 year olds and others do not permit us to adopt a single system or take up any strict position in that argument.

In speeches before all kinds of audiences throughout the country and (when written) sent to you in press releases, I have repeatedly emphasized that the term "tertiary" should be understood as a definition of a level of education - a third stage continuing from and complementary to primary and secondary education - and not the universal prescription of one form of institutional provision. Phillip Whitehead also expressed that view at the Association of Vice-Principals of Colleges on June 5.

My commitment is to a statutory right of tertiary education, to effective education maintenance allowance and to assist and accelerate the already well established movement of courses, modular development and co-ordination with MSC programmes in order to raise the rate of participation by 16-19 year olds in education and training and to improve the quality, availability and attractiveness of provision for young people and adults.

I hope that, when the processes of deliberation, consultation and policy formulation are completed, my party will first present a policy for universal, comprehensive, continuing education which will include all of those essential ingredients and then implement such a policy at the earliest opportunity with the statutory authority and financial resources needed for such a task.

It is interesting and heartening to note that, even without any positive encouragement from the Government, local education authorities, schools and further education institutions are taking such initiatives despite the severe impediments imposed by financial cuts. The leaps from the further education legal basis working group provide further encouragement, although the general agreement on principles and heated dispute over resources are likely to provide us with a reprise of the debates on the Special Education Bill, especially if the Government again uses the device of giving generous definitions in a White Paper, escape clauses in a Bill and no money for the Act.

With or without a Tory reform of further education law, I hope that my party will introduce provision that is comprehensive in quality and quantity. We shall have to do that against the background of youth and adult unemployment, underemployment and mis-

employment and youth and adult under-participation and under-provision in education and training. It will not be possible to attain the speed, breadth or efficacy of new and improved provision if we wait for the establishment of a universal tertiary college system.

We can only deal with the organisational, institutional, locational, manpower, course and resource problems produced by an effort to provide a statutory right to a third stage of education if we use the means already at our disposal. That is why some of the provision will have to be in schools, in colleges of further education, in technical colleges and sixth form colleges as well as in the tertiary colleges that exist and will become more common as demographics, economics, curriculum needs and realities, adolescent taste and adult attitudes as well as educational preference induce further demand for that particular form of 16-19 provision in an increasing number of areas.

That is not "tamely falling into line behind Macfarlane". The legislation to define the right to a tertiary stage of education and the resources to make that right meaningful would contrast directly with the evasion, inactivity and parsimony of the Government's approach to systematic education for 16-19 year olds. If the under-secretary of state is by the same miracle of monetarism empowered to put funds, legal rights and curriculum development where only his platitudes now are, I would happily fall into line behind him. So would anyone else who is now alarmed by the prejudice, vested interest, divisions and under-provisions which inhibit the development of post-16 education in Britain. NBSL KINNOK, House of Commons.

trust that *The TES* will avoid such prejudice, and will view impartially any evidence on the value of the new-style BED as the training institutions monitor and evaluate their courses.

ALISON SHRUBSOLE, Principal, Homerton College, Cambridge

Invest in physics

Sir, - Everyone involved in education must be concerned about the dearth of well-qualified teachers of physics.

As a solution the Government is about to launch a pilot scheme which will provide 60 scholarships for the next two years for mathematics and physical science graduates to take the PGCE at certain selected institutions. Yet too often PGCE courses are found wanting by students who subsequently become disillusioned with teaching. We must guard against this, ensuring the courses are more relevant to the demands of the future vocation.

This DES proposal is no more than a stop-gap solution to the shortage and the Government must adopt a very different attitude towards education if it is to confront the deeper problems encountered in attracting graduates into science teaching, problems which are common to the profession as a whole: the need for greater recognition by teachers of the value of their work and, moreover, greater acknowledgement by society of the excessive demands placed upon teachers. Science teaching also faces its own peculiar difficulty because alternative, competing careers in industry can offer very attractive prospects and remuneration.

Then there is the problem of maintaining the enthusiasm of trained science teachers for their career and subject. In this respect disillusionment can quickly set in when teaching syllabuses whose relevance to the current and future scientific interests of pupils is questionable and when trying to support these interests with inadequate facilities and materials, especially in the light of present educational cut-backs.

These problems will have to be faced sometime if we are to have any investment in the futures of schoolchildren. DR C. BUCK, John Lyon School, Middle Road, Harrow.

Sir, - There is an undoubted shortage of physics teachers. However, I am surprised at the quote from the Institute of Physics' recent report *Shortage of Physics Teachers*: "Sciences teaching in the lower and middle schools may be entrusted to biologists or to anyone who can be persuaded to try" (*The TES*, June 5).

Those most qualified to teach lower middle science are surely those who have O and A levels in all three sciences as well as their specialist degrees. The majority of biologists do have these qualifications (including A level physics) and are admirably suited to the job. How many physics schools have even O level biology and yet purport to be complete science teachers? Rather than begrudgingly entrusting science teaching to biologists, I would suggest that they are most fit for the purpose.

I was glad to read that the Institute of Physics does not agree with the Government's "think tank" recommendation to pay physics teachers more than others. Even though they are probably not fully qualified to teach all of the sciences, physics teachers often become heads of science merely because of their short supply and so, in a way, are paid at a higher level than other scientists.

DAVID G. BEAVIS, "Avon" 28 Eden Grove, Middlesbrough, near Shildon, Co. Durham

Letters for publication should be as short as possible and should be written on one side of the paper only. The Editor reserves the right to omit an article if necessary.

No nuclear propaganda from Christian Education Movement

Sir, - I note that Mr Simon Wheeler (Talkback, June 12) links the Christian Education Movement with the CND and World Peace Movement and asserts that "they seem to be seeking to indoctrinate children in schools, usually through teachers who are members of these organizations".

As a matter of fact our publications catalogue contains nothing on the subject of nuclear arms and since the movement has never discussed nuclear or any other forms of war, it has not formulated a policy statement to which I could make reference.

During the academic year two inter-schools conferences for sixth form students have been arranged by the movement's staff on the subject of nuclear arms. On both occasions the presentations were carefully balanced and included opposing views; having heard expositions of the issues, pupils were left to make up their own minds or to suspend judgment. Both conferences had a direct bearing on A level RE syllabuses. A short article in the spring issue of *CEM Magazine* drew attention to some of the questions and to some of the sources of information which might be used in a discussion about arms-spending, but again no view was expressed.

The listing of the movement under the introductory words "proliferation of propaganda groups" suggests ignorance, the movement is neither a new proliferation nor a propaganda group. The history of the movement goes back through its antecedents to the 1880s; the movement is a professional and ecumenical organization concerned with education. It publishes the *British Journal of Religious Education* and curriculum material termly, is responsible for a research programme,

and runs courses and conferences for teachers and pupils. Part of its function is as a subject teaching association for teachers of Religious Education and, as such, it is a member of the Council of Subject Teaching Associations. The movement's contribution to Religious Education is well recognized by I.E.A.s. and by the DES and HMI.

To write that the movement has engaged in propaganda through teachers who are its members is remarkably irresponsible. No doubt teachers who are members of all kinds of organizations become involved in all kinds of activities, but the organizations and the activities have no necessary link. No member of CEM can be engaged in propaganda about nuclear arms as a consequence of his membership of CEM, though no doubt there may be some for whom this is a matter of regret.

JOHN M. SUTCLIFFE, Christian Education Movement, 2 Chester House, Pages Lane, London N10.

Sir, - Like Simon Wheeler, I have tackled the question of nuclear weapons at school, though not with third formers - I would consider them too young for such a topic - but with lower sixth liberal studies groups. I too have found that it is easy to obtain material from CND, but the only government publication I was able to get was *Protect and Survive*, which reduced some of my pupils to helpless laughter, while others felt extremely angry. We had also studied the 1956 Civil Defence Manual, which gives the sober facts and figures. In addition, we used newspaper cuttings.

I was anxious, like Mr Wheeler, to

present a balanced and objective picture. It did not occur to me to ring County Hall, as he did. I wrote to HMSO asking if they had suitable material for a dozen 16-year-olds, and inquiring about the price and content of the booklet *Nuclear Weapons* advertised in *Protect and Survive*. The only response was an invoice for more than £50 for 12 copies of *Nuclear Weapons*. There was no covering letter. The government does not seem to be at all interested in this aspect of education.

Mr Wheeler accuses CND of "manipulating" the young "into the belief that 'one bang and we're all dead, so what's the point'". I too have come across this disturbing opinion in quite young children. It certainly does not emanate from CND, and if this is how Mr Wheeler presented CND's views, then he is not justified in his self-satisfied conclusion: "I have done my job as well as I can: they have both sides of the argument". He has misrepresented one side.

He does not tell us how the emergency planning officer's volunteer scientific adviser convinced him and the audience of children and parents at his evening meeting "that it is essential to prepare", but clearly there was no speaker for CND present. If there had been, he would certainly have discussed the plight of the millions of survivors of nuclear attack. The inadequacy in fact the impossibility of "home defence" is one of the reasons for advocating nuclear disarmament.

Mr Wheeler asserts that "propaganda groups such as CND... seem to be seeking to indoctrinate children in schools, usually through teachers who are members of these organizations." I am a member of CND, but CND has never asked me to indoctrinate chil-

ren, and I would not want to do so. I present the facts, but I warn the youngsters that I have strong views on these facts which many people do not share. I urge them to discuss these questions not only with me, but with each other and with their families and friends. I don't think we have to pretend to the children to be totally neutral and without convictions.

It is fairly obvious that Mr Wheeler does not so pretend either. IRENE GILL, 25 Redriff Close, Maidenhead.

Sir, - Simon Wheeler's description of his "campaign" project concerning nuclear weapons reads like a *le Carré* novel without an ending. It is full of non sequiturs, half statements and an underlying complacency that a teacher's only goal is objectivity in presentation.

On such a sensitive issue as civil defence, what justification is there for believing that an emergency planning officer in County Hall is any more likely to be custodian of the facts than the research of a group like CND? He is bound to present his case in terms of hope for he would be failing in his job if he didn't. What he is also doing is preparing the children and parents for the likelihood of nuclear war, thus lowering the point at which nuclear weapons may be "acceptably" used.

While agreeing that all issues should be put across objectively - it seems to me irrelevant whether CND is political or not - it does not mean we have to remain neutral as Simon Wheeler implies. The stimulation of the inquisitive mind is the *sine qua non* of teaching and very often one's own commitment is appreciated (if not

always understood) by the pupils. Without such involvement a subject may well be dull and technical, a Hamlet without the Prince.

The involvement does not go so far as to become a form of indoctrination. Any move to establish a group of whatever political creed, religion or belief must have its origin among the pupils themselves so that they are seen to be taking the initiative. J. A. HORSLEY, 6 The Avenue, Taunton, Somerset.

Sir, - I read with some amusement Simon Wheeler's article on the relative merits of the arguments for and against nuclear disarmament.

He describes how the "myths" perpetuated by CND and other peace organizations were dispelled by facts, objectively given, by the emerging planning officer from County Hall. The children in his project group, he suggests, had heard both sides of the argument and were free to make up their own minds. I very much doubt it, if he led them to believe, as he implies, that the lecturer from County Hall was a neutral, disinterested pillar of the scientific community, somehow in possession of "the truth", whereas the proponents of CND, as propagandists, misrepresented it. If he is worried about his children being indoctrinated, I suggest that he encourages them to treat all opinions, including those from County Hall, with caution. "When is something political?" he asks. He might also ask himself: "When are opinions facts?"

SHIRLEY B. MERCER, 36 Carrington Road, Sheffield.

Also, that he has stamina enough to sustain him through the hard grind of an exacting task which may not necessarily end in satisfaction. Further, they must warn him that blind enthusiasm alone will not help him to view his work sufficiently critically to give it credibility. Related study may seem irksome, but in the end it can assist the emergence of fruitful outcomes; not the least of which could be the eventual recognition of independent criteria for action research.

Further, I can only acknowledge with gratitude the patient support offered to me by the University of Leicester in connection with my own part-time, practical research, which relates directly to my post in school. Also, for the encouragement I have received in my quest to use only

straightforward techniques which will ease the dissemination of any resulting useful outcomes. MAUREEN A. A. HARDY, Sandfield Close Primary School, Leicester.

Gaps report Sir, - With reference to the article entitled "When gaps overlap" by Mary Warwick (June 5), I write to inform you that the publication entitled *Education: the Divisions* When is available from The General Office, The Registry, University College of Swansea, Singleton Park, Swansea SA2 8PP. Price 50p. SUSAN JENKINS, Administrative Assistant, University College of Swansea.

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present. In spite of the fact that many of the hospitals have ancient buildings which were formerly workhouses or asylums, and also a shortage of money, there has been a tremendous improvement in these hospitals in the last few years. The programme concentrated exclusively on the bad points but pointedly avoided the good points. Most hospitals these days have occupational therapy departments, physiotherapy departments, schools and other facilities attached to them. They are staffed with dedicated and caring staff of all professions. If it were not for the fact that they cared, many of them would have left long ago.

Obviously, as the programme had pointed out, a great deal of improvement of facilities needs to be carried out, but until we have a government that is prepared to put up the money for such projects, the staff of these hospitals will continue to have to soldier on with very inadequate resources.

Peter Newell's unkind remarks about the nursing staff and the League of Friends added nothing constructive to the debate. If the staff did not continue to work in such situations what would happen to the residents then?

I am quite sure that money would not be automatically made available to rehouse them outside the hospitals. As for the League of Friends, they are a group of people, relatives and friends of residents, who were hard to raise money for the residents. They are very much guided by the hospital authorities in what they provide for them. They were probably informed that a play area was required and accordingly allocated the money. It is not the play area that is at fault but the use made of it.

What is needed in the discussion of this problem is a constructive long-term plan to phase out these hospitals and replace them by alternative suitable accommodation. CYRIL TAYLOR, Headmaster, Bridge Hospital School, Hatfield Road, Wisman.

Subscription up £5

Sir, - I am sorry to have to correct your report on the Association of Vice-Principals of Colleges' change of subscription, but the item on page 5 (June 12) is so misleading that it will alarm our membership. As your correspondent correctly states, the subscription has been increased by £5 to £15. Your headline refers to Vice-Principals paying £10 more. As we are unlikely to contact our membership in the immediate future, I would welcome a clear restatement of the position.

F. ROSAMOND, Honorary Secretary, The Association of Vice-Principals of Colleges, Windsor and Maidenhead College, Maidenhead, Berkshire.

Warm to a Bed

Sir, - I was surprised to read your piece headed "How much help is a BED?" (June 5). Bert Lodge had offered a different interpretation from ours of the evidence provided by a recent survey of attitudes of 358 Homerton College graduates towards the old-style BED from 1971 to 1979.

Of the 85 per cent who went straight to teaching posts, many explained how the BED had helped them to gain their first teaching appointment, such as qualifying them to teach a particular subject to A level or to offer a special strength in the primary school. Of this group, 17 per cent had later gone on to further study, 6 per cent at master's degree level. Not all had followed a career in teaching, 9 per cent had proceeded to a wide range of other careers, reporting that they found the BED adequate or helpful at the level of graduate entry. Although the survey was concerned mainly with the influence of the BED on graduates' careers, many respondents offered favourable or enthusiastic comments about the perceived value of the BED in terms of intellectual growth, increase in self-confidence, and general personal development.

It is currently fashionable to write disparagingly of the BED, degree, I

Inadequacies

Sir, - In the article "Leading the way" (June 5), Richard Wood and Jennifer Slater are quite right in their analysis of the situation as it now appears to be developing in the open sixth forms. However, the practical measures needed are in many instances not perceived by the schools themselves.

It is not realistic to envisage on the one hand, a greatly augmented sixth form with weakly motivated pupils, and on the other, basically to erode those areas of the school best equipped to offer some help.

I have visited many schools where art and design departments suffer from inadequate staffing, and where facilities remain unused for the same reason. Indeed, some of the best schools in terms of equipment and expertise cannot even use these facilities in the normal day to day curriculum, due either to lack of staff or of funding.

These are vital areas which could be of immense use to the open sixth in the

1980s, incorporating as they do, many diverse opportunities to acquire skills which will appeal to weakly motivated pupils. Printmaking, photography, ceramics, and commercial graphics are obvious areas of interest and usefulness.

The current school philosophy suffers from an obsessive schizophrenia - departments traditionally neglected, such as music, drama, art, domestic science, are likely to be those areas best equipped to deal with the new intake of sixth formers, and will not be asked to do so. Yet these departments are found to be either chronically understaffed or under equipped, or if they have the equipment cannot afford to use it due to capitation limitations. At the same time, a subject such as science, notoriously an expensive cost related area, is enjoying unequalled popularity due to present government thinking and policy.

In "Leading the way", I doubt very much whether pastoral care, however

skilled and well meaning will affect the general inadequacies of present educational provision in those very areas with which they express so much concern. Such provisions are still likely to be very much an afterthought. OWEN STALEY, Area Moderator, 16-plus Art and Design, The West Yorkshire and Lindsey Regional Examination Board.

Autistic children Sir, - I would like to comment on a report in *The TES* (May 29) on the projected research by Mr John Tierney into "the origins of profound emotional disturbance and autistic behaviour" in children. This represents to me one of the most extreme examples of muddled thinking I have yet seen in your paper, implying as does that one and the same thing, Autistic behaviour has, as I understand it, specific signs and symptoms, whereas emotional disturbance is a blanket term covering a vast area. While autistic children may be emotionally disturbed, by no means are all emotionally disturbed children autistic. I suggest this confusion may be one reason why Mr Tierney has had difficulty in obtaining the £10,000 he seeks - unless it is merely your reporter who is confused.

RITA KEYES, 10 Littleton Crescent, Harrow, Middlesex.

Action research

Sir, - As a teacher/researcher, I wish to offer an alternative perspective from that of Mr Venenoff's (June 5), although I have some sympathy for his point of view. I feel that those of us who seek to promote action research must remember that we have the responsibility of establishing its credibility. At present, it is viewed as a dynamic dimension of existing investigation techniques and we can only work within that framework. Hopefully, if we are skillful, one day it may merit assessment on its own terms of reference.

In defence of the universities, it seems fair to point out that they have the responsibility for ensuring that a potential researcher possesses a sufficient grasp of the appropriate sources and established techniques to either utilize or adapt them effectively. Adaptation is allowed providing that it is supported by reasoned justification.



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Talkback

Butterfly countdown Geoffrey Young

Anybody quizzing their favourite walks realizes that butterflies seem less common than they were. Surely (in the good old pre-conservation days?) you could scatter clouds of Meadow Browns or Common Blues? Can you still find them, and does the garden butterfly attract as many as it used? Now is the time to find out. Butterflies have been lagging behind wild flowers and birds in the conservation-awakeness stakes. To correct that, and put some pep and cash into butterfly care, senior conservation bodies have declared a Butterfly Year. Its start was marked by the issue of special Post Office stamps in May.

WATCH is organizing a national Butterfly Countdown, in collaboration with the Royal Society for Nature Conservation and its associated county trusts for nature conservation (who manage nature reserves), and with scientists at the ITE Furzebrook Research Station, who will also supervise the analysis of the results.

The aim is to establish definite facts about the number and distribution of butterflies of all kinds. The surveyors are to be non-experts - school pupils of all ages.

The census takes the form of a daily walk, a half hour stroll in countryside or in suburb (or even town park), keeping to the same route each day. The surveyors have to record the kinds of area they pass through, and imagine that they are casting a two metre wide "path" as they walk. They count the butterflies seen in front of them on that path, and those seen from the path.

In July and August, the butterflies will belong to five main families: the BROWNS have wings with eye spots

the vivid BLUES and COPPERS and (high in trees) HAIRSTREAKS the WHITES and YELLOWS the darning, moth-like SKIPPERS the gauzy NYMPHALIDS, but also the rarer FRITILLARIES, but also the Red Admiral, the Peacock and the Small Tortoiseshell of gardens, town parks and derelict land.

No special knowledge or skill is needed, just good observation and accurate recording. We need only to know the family of the butterflies, easy to identify by colour and wing pattern, though of course the species names

available to help at odd times can be sensitive to the needs and potential of individuals, and so guide them to make the best use of their abilities.

These two activities still cater for a minority. Yet there is surely a need to educate all pupils to a minimum level in computer awareness. We have had success with minimal effort by introducing computer studies as a short course for all third-form pupils.

This was best done by a computer studies teacher exchanging classes with each third form teacher in turn through the year. (This was found easiest in maths lessons). The course would take two weeks (eight lessons), and in that time the important aspects of computer appreciation could be covered.

Thus each pupil at the age of 13 would come to terms with computer machinery and how it worked (no longer a magic box), what was needed to make it work, the idea of a language (and how simple programming can be), the uses of computers, their impact on our future, and enough history to show parallels with the "other" industrial revolution.

The course is made interesting with the occasional film, and some practical demonstrations of the computer tackling a variety of tasks, from games to scientific simulations.

Cliff Denton was formerly Head of Computing at Banbury School. He is now in the Department of Educational Studies, Oxford.

would be very useful.

Not much dedication is needed. We ask for only five daily walks, in warm, stillish weather, though ten walks or more would be useful. If we can get enough reports, spread through July and August, even such a simple survey will yield new, useful information. It will be a kind of "snapshot", never before attempted on this scale.

In addition, we invite our helpers to keep a diary of things they notice - and the diaries could shed light on some things which still puzzle us about butterfly behaviour. For example, how much of a "territory" do common butterflies stake out? What stimulates courtship - the weather or the date? Is the whole of the possible habitat (grassy fields, for example) used, or only some of it?

We will be rewarding good work, with a first prize of an original butterfly painting by Gordon Benningfield, to be won by the school, group of pupils or individual sending the most interesting or best researched report or diary.

The results of the Butterfly Countdown will be announced this Autumn, at a special talk-in of some of those who took part, hosted by David Bellamy. We hope your school can assist us on this survey. Generous help from the Post Office has enabled us to publish a special full-colour briefing, which is being sent to 12,000 schools.

If you do not receive a copy through the post in the next 10 days or so, and would like to take part, you can obtain one from (send s.a.e., A4 size, 20p stamp): WATCH, 22 The Green, Nettleham, Lincoln LN2 2NR. The briefing may be photographed for groups of pupils, but we regret that we cannot send more than one copy to each school.

Each registered WATCH member receives a copy, and we would be happy to send details of WATCH and its work. In brief, it is a national out-of-doors club for children and young teenagers, sponsored by *The Sunday Times* and the Royal Society for Nature Conservation.

Members receive a badge, and the magazine WATCHWORD for each main holiday, and take part in national projects such as this census. They also receive a programme of local events organized for them by their county Nature Conservation Trust.

The personal subscription to WATCH is £2 a year, with reduced rates for family members and for schools' affiliations.

Geoffrey Young is creative director of WATCH.



Buster Mottram, one of the rare English successes at world-class level.

Hopeless for hopefuls?

Don Davies

This article is based on a research project begun in November, 1976, and involving more than 200 junior tournament players. The overriding impression is that each year so much talent simply goes to waste for lack of appropriate guidance and effective support.

The British record at world class level is, of course, lamentable. Of surprise to many is the continuing failure of young British players of promise ever to fulfil that promise. The surprising thing is that this should occasion surprise, for the prevailing policies and conditions are such as firmly to deny the development of ability.

For the aspiring player the obstacles to progress are immense. Obviously the shortage of indoor facilities is a factor and there is research evidence to support this. But even with greater winter provision it is unlikely that there will be any major improvement in standards. The overriding concern is the development of ability, and central to this is the quality and the extent of the learning experience. This is of paramount importance for the acquisition of skill.

Research shows, however, that the quality of the practice and coaching which the young British player receives is frequently quite inadequate. Only 7 per cent of the leading juniors ever practice against international players, and this for just one period a week; and only 2 per cent consider they receive sufficient individual coaching.

The inadequacy of the provision is underlined by the fact that about 60 per cent of our juniors feel they to reach world class level they must seek training abroad. The problem, therefore, is not so much a question of dedication, but of the opportunity which is lacking to develop ability under expert guidance.

Entirely dominating the policy towards training is the belief that competitive play guarantees progress. It is a fallacious assumption. Tournament play provides an opportunity for the assessment of ability under stressful conditions, it is far from being the ideal vehicle for its development.

The emphasis on competition means that far too much importance is attached to the winning of

tournaments and matches, with the result that young players become over-concerned about winning at a particular age level, and neglect to develop the power and sophistication of stroke to compete successfully at international level.

Training schemes are such as continually to place the self-esteem and prestige of our young players under threat. This has a disruptive effect on performance and progress, serving to undermine the confidence of even the toughest-minded. As a result progress tends to "plateau out" about the age of sixteen or so. At this stage, many promising players abandon the tournament scene altogether.

Taking part in tournaments can be a waste of time. Facilities for practice are never available. During the first half of the week the better players have one, possibly two matches each day, and spend the rest of the time with nothing to do. The time could be better spent in worthwhile practice.

Rising juniors need, above all, the opportunity for regular first class coaching and practice; only in this way can they possibly develop the anticipation needed to succeed in the world class game. Anticipation is something which is learned: the ability to anticipate, to make accurate predictions, stems from experience of playing at a high level.

My research supports the view that as the promising player begins to develop, practice with moderate to high level of limited value when set beside the gains to be had from sustained practice with top class players. Almost without exception, young British "hopefuls" do not have this opportunity.

For young players to have any hope at all of reaching Wimbledon standard, they must have dedicated and well-off parents. Some parents are spending more than £1500 a year, or more than £2000 over the six year period of junior ranks from the age of 12 to 18. Coaching must generally be paid for because it is virtually non-existent in school on an individual basis.

But apart from financial considerations, both parents and their protégés are very much on their own. This is vividly underlined by the fact that there is little evidence of professional advice and support at tournaments, although this would be welcomed by the vast majority of young players.

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features

Unpopular Education is a critical analysis of the politics of schooling since 1944, written by the Education Group at the Centre for Contemporary Cultural Studies in Birmingham. In these edited extracts from their book, the authors consider the limitations of Labour Party policies, examine the power of the press to influence policy makers, and highlight some of the drawbacks of current Conservative Party 'populism'

"I am convinced that, as a people, we have made up our minds to put an end to 1939 and all that - an end to poverty and insecurity, to privilege and vested interest, to war and threat of war... A new democratic consciousness is arising. Already it has found practical expression in the surge of feeling which swept Labour to power at the General Election.... In March it will almost certainly engulf many of the county councils. It is sweeping away the political obstacles in the path of social, including educational, advance.... (Miss Ellen Wilkinson) has shown that she realizes that there can be no real and lasting democracy without a democratic educational system."

With this rallying cry, G.C.T. Giles, the NUT president in 1944-45, concluded his analysis of the possibilities of the 1944 Act. *The New School* 76, his fine campaigning book, also contains a political fable, set in the English town of Barset. Here the progressive education officer routs the various enemies of educational progress (including Councillor Bumble, Colonel Blimp and the headmaster of the local grammar school) at a great public meeting of the parents and citizens of the borough. The case for multilateralism is won; the borough hums with the energetic and earnest discussion of educational issues.

Our educational world of the eighties seems, in many respects, a grotesque inversion of Giles' utopian vision. In 1946 it seemed to Giles that the obsolete social and economic system of Blimp, Bumble and the "economaniacs" (the careful custodians of the rates) had been given notice to quit in the face of a progressive and popular educational alliance. Today, Mr. Bumble, Colonel Blimp (with two children at private school and a determination to cut school meals) and the economaniacs are firmly installed in power.

Educationalists, teachers and egalitarians are in the wilderness. The "people" are having their say, not at local meetings, but through the depopulated ventriloquism of the mass media. Their interests are defined, not in terms of political citizenship and democratic participation, but according to the mean and self-regarding doctrine of "parental choice".

Our aim has been to give a detailed historical account of this strange reversal - and also to explain it. At the centre of this account is the rise and fall of a particular set of policies and assumptions about education which we term "social democratic".

We believe it would be futile to attempt to return to the policies of the sixties. Instead, we need to rethink the fundamental features of a socialist educational policy. It is not enough to consult the "experts" (teachers or educationalists), nor resurrect the earlier policies, nor even to promise to undo the harm which the present government is doing.

Any new policy will have to start from the everyday experiences of schooling, especially those of working-class parents and children, and from the ways these are structured by the larger distributions of knowledge and power in our society. It will have to be a wider politics too, not limited to questions of access to schooling (equal opportunity), but challenging the modern narrowing of this curriculum to "capitalist schooling", and making a reality of the rhetoric of schools democracy.

It is a politics to be realised the existing political battles of the left (or those not wedded to a social-democratic programme) will need to become educational agencies. We need to revive, in appropriate forms, a long tradition of popular counter- or self-education, independent of existing public agencies and the direct control of participants.



Ellen Wilkinson, Labour minister responsible for the postwar reconstruction of schools; no real and lasting democracy without a democratic educational system?

Serving two masters

The most obvious feature of the Labour Party's educational repertoire has been a persistent duality of goals. R.H. Tawney's description in *Equality* of the difference between "practical equality" and "equality of opportunity" remains classic.

He identified equality of opportunity as a fundamentally bourgeois creed, born in the battle against the Ancien Régime, and adopted as a practical philosophy by the English middle class. As a social goal it had great strengths; a high degree of openness and social mobility remained; he argued, important in modern societies.

But equality of opportunity was what Tawney called "the Tadpole Philosophy". It was supposed to reconcile some poor wriggling creatures, with no arms or legs, to an early death, on the grounds that some of their friends could "rise to be frogs". "Practical equality", by contrast, a social ideal with roots in working-class experience, questioned these very distinctions.

Labour's Fabianism or Liberalism has been centrally concerned with the mission of managing and reforming a capitalist society, by removing, especially, the most important inhibitions to capitalism's progressive side - a more "open"

society. In the more technological or "economic" part of the repertoire the connection is plain enough; Labour's leadership has been concerned to establish the conditions for a faster rate of accumulation of national capital.

The other side of Labour's ideas has revolved around the representation of popular interests in education. Egalitarianism is the elementary form of a popular educational politics, asserting, on behalf of subordinate social groups, a greater degree of fairness. At this very general level of analysis, Labour's repertoire has been formed in the relation between popular interests and "capitalist schooling".

Labour, especially when in power, has always served two masters in this way, usually by insisting on the identity of their interests. It has represented working-class interests as national interests; and national interests, very largely, as the interests of capital. This project of the harmonization of class interests is what, in the end, warrants the term "social democracy".

In the sixties Labour managed a peculiar combination of educational reform and economic utility, based upon the erroneous belief that modern capitalist enterprise required a universal and continuous increase in "skill" within its work force; from the mid-seventies (in the Callaghan-

Williams "great debate" for example), the ground of "equality" (and a period of more open educational experimentation) was abandoned, in the abject pursuit of "the needs of industry" and the fear of imminent Tory successes.

Popular and especially working-class interests in education were now almost entirely defined in terms of capitalist schooling, as though the possibilities of human development could be contained within the existing social forms. In the end, Labour failed in both of its traditional tasks: it failed adequately to represent popular educational needs and experiences, and it increasingly presided over economic failure, not economic success.

Moreover, once its policies for state education were threatened, Labour found itself in a position of peculiar bankruptcy. Since the early twenties, and still more surely since the War, its educational strategy has been limited to the reform of the state system of schools and colleges. It has not had an educational strategy of its own, and a direct educational relation with the classes and social groups it sought to represent. Its educational influence has often been negative, holding down popular aspirations in a form appropriate to the marshalling of votes on election days.

It was to prove difficult, therefore, to develop a new policy more in tune with popular experience, and with a more realistic grasp of the deep ambiguities (especially for working-class people) of schooling. That challenge, and the same difficulties in responding to it, still face the party in 1981.

Who, then, did the sixties policies represent? It is useful to ask three questions: who were the most important agents in the sixties policies; who were their principal objects, and who were the main beneficiaries?

The most active agents were professionals of various kinds. Under Labour's compact with the teachers, questions of educational content were assigned directly to the profession. The curriculum and teaching methods of schools were matters for professional "experts" and not, as they should be, for an open and contentious politics.

Similarly, questions of the popular control of schooling were subordinated to more narrowly administrative considerations - the province of local and national administrators. This corresponded to a more general shift in the nature of Labour's politics: the relative marginalization of the working-class elements, and the growth of professional middle-class membership and preoccupations.

In his study of these evolutions in Liverpool in the sixties, *The Decline of Working Class Politics*, Barry Hindess shows how the very styles of politics were affected: away from a concern with day-to-day problems and with the grass-roots effects of administration; and towards an overriding stress on principles of national policy. In this second, middle-class style, administration is regarded as a relatively neutral activity, and the problem of the bureaucratic or coercive character of local state agencies is ignored.

This description fits Revisionism too with great accuracy. Revisionism's educational policy was, indeed, a policy of the professionals; of professional researchers who supplied the facts; of professionalized teachers who staffed the "service"; of professional administrators more "expert", in their way, than ministers; and last, and by no means least, of the professional practitioners of policy itself, who decided on questions of priorities and values.

How do working-class people figure in these conversations? They figure predominantly in the

features

form of problems, of objects, of policy's "target populations". Sociological researchers, official reports and political pronouncements present working people mainly as the bearers of educationally disadvantageous behaviour. They also operated with a notion of "equality" that was close, perhaps identical, to a notion of "soft" forms of social control: the idea of equality-as-a-means-to-social-cohesion.

This picture of the largely middle-class character of Labour's sixties programmes helps to explain the failure of the popular push for comprehensivisation in these years. Again, it was mainly the professional sections of the local middle classes that pushed for these changes. This is reinforced by what we know about the effects of educational expansion since World War II, and what we may suspect (but cannot yet show) about comprehensivisation in the seventies.

The seventies saw the social-democratic settlement become vulnerable on many fronts. A deep and deepening economic crisis undermined its foundations of modernization, while a crisis of social control denied its promise of harmonization.

Supporters of social democracy became more doubting - academics through the work of the "New Sociology", the de-schoolers, Jencks and others; teachers through dissatisfaction with salaries, and their experience of the results of social democratic reforms (ROSLA implemented in adverse circumstances, inadequate comprehensivisation). The DES and the local authorities were subjected to a series of disorienting reforms (and critiques) which inhibited any potential defence of social democratic expansionism.

In this context the attack of the New Right was peculiarly well timed and effective. The decade saw the deconstruction of the plausibility well timed and effective. The decade saw the deconstruction of the plausibility of social democratic concepts and the propagation of a new version of "what schools are for".

Fight for Education: a Black Paper appeared in 1969 as a set of dissenting right-wing essays from the underground educational world, by which it was largely reviled and discounted. Only six years later, by 1975, the fourth *Black Paper* was able to claim with satisfaction a wide realization that "education had not delivered the goods... there was now a case that had to be answered".

In the "Great Debate" of the following year many of the writers' assumptions had become indistinguishable from those of the Labour

Halsey, Heath and Ridge, in *Origins and Destinations*, show that the class chances of reaching university education have remained constant since the war, but that the "absolute gains for the service [ie middle] class were massive compared with those for the working class". "There is", as the authors put it, "no universal law linking expansion to equality." First to benefit were those already in a relatively privileged position.

When we speak, then, of the "popular" elements in Labour's social alliance and educational programme in the sixties, it is important to clarify what this means. The popular elements themselves consisted of an alliance in which sections of the professional middle class were clearly in dominance. This gave to Labour's repertoire some elements of opposition to the purer forms of "capitalist schooling" and training.

In practice, it lent a particular salience to those aspects of social-democratic policy that concerned the educational chances of the children of professionals, and those who wished to become professionals. If Labour's policies were "popular" in this qualitative sense, they were certainly not "working class", and still more surely, neither socialist nor feminist in character.

It is still not possible to talk about a post-comprehensive phase of school organization, as though this reform was finally secured. But we can consider the effects of a movement towards the common school upon the possibilities of popular struggles around access. The more the ideal of the common school is approached (or believed to be approached), the more a politics based on access loses its clarity and its force. The common sense of "education" now operate with a particular plausibility: when selection is minimized or hidden, it really does appear that

educational outcomes are simply the result of individual abilities.

In fact, outcomes that are similar to those secured under tripartism by formal selection and exclusion seem to occur in more "open" systems too, but by the more informal interactions of structure and culture. Certainly they are no longer plausibly thought of as only a product of "home and school". A politics of access, then, undercuts the basis of its own support (in the experience of conspicuous exclusion) without confronting the most fundamental reasons for inequality. It is in this sense that this politics is "reformist" and incorporative.

If we take account of these various dimensions - the contradictoriness of policy, its middle-class character, the absence of a real, popular and especially working-class connection, and the limits of a politics of access - the exhaustion and collapse of the whole repertoire in the seventies is easier to understand.

were beside the point. The analysis sought its authority first in an appeal to "parents", second in a stress on aspirations to mobility which at the same time suggested their actual or potential frustration. It was these two "moves" in the arguments which preceded but also accounted for their astonishingly high visibility in the "popular" mass dailies.

The key shift was undoubtedly the appeal to the figure of "the parent". This was a basic departure from previous Tory educational work. There was no longer an appeal to "traditional values" of an ever more obviously partial and selective kind. Instead the new attitudes were offered as those of parental worry and suspected popular disquiet - as ratified by the unspoken (though now conveniently articulated) fears of a parental "silent majority". In a classic "populist" manoeuvre, a version of "ordinary parents" and of parental interests was set against the forces by whom they were scorned.

"The parent" as such could only be a misleading abstraction, which overlaid and disguised differences. Yet its ideological reach was considerable. The "ordinary" parent was particularly reassuring against the permissiveness and rejection of the family imputed to the counter-culture at the turn of the decade. As a reference point "the parent" was classless, without gender, and seeking a better life for the child - a generalizing focus for worries about "the nation" and its children.

It was thus a unifying concept, collapsing differences and neutralising them in a "classless" ideology. This could then be affirmed positively, as advocated by the party's ideologists, against the "divisive" and "anarchistic" concerns with class origin of Labour and the Labour movement which, it was implied, only sealed the working-class child's fate. Attention was turned to "parent power", and to a version of "them" by which its interests were ignored.

The overarching and plausible reference point for the ideology was the exclusion of parents from the processes of schooling, their lack of knowledge about the institutions which their children were legally obliged to attend. To the undoubted lack of involvement was fixed the powerful suggestion of "what has gone wrong", given the palpable failure of many schools to reach or satisfy children or their parents.

In an offered version of "popular memory" this became the falling off from greatness; a weakness and loss of necessary discipline, a lack of attention to the necessary skills and stages of learning. A parental "us" was rallied against the serried ranks of an indifferent "them".

The *Black Papers* began in a series of disconnected pushes, but even these served to "organize" some of the conventional axiomatic wisdom, the stock of grumbles, which had retained real purchase while social democratic ideas took hold elsewhere: "up there" in the colleges, government and liberal media. The right's new commentary was inextricable from a version of widespread failure, and that version was offered as "obvious", as common sense.

The ideological case turned (more cuttingly aimed the beleaguered early seventies) on the importance of aspirations to a better life, and on schools as the central site of their fulfillment, or their frustration. The repeated motif was the warning about the "holding back" of the clever child - and whose child, for a parent, is not?

The opening stage in the right's advance was therefore to commence the percolation of a new "common sense" about schools - however half-formed and contradictory. At this point the ideas had a confusing status, combining general arguments with the advocacy of implausible experiments such as the voucher system, which an older statesman such as Angus Maude, for example, thought impracticable, in 1971.

Bad news of schooling

government itself. By 1979 the electorate could walk past a large Saatchi and Saatchi election poster for the Tories: *Educashun Isn't Wurking*. In the ensuing government an ex-minister of education took office as the most committedly right wing premier since the war, and appointed a *Black Paper* editor and articulately aggressive right wing ideologue as her minister with responsibility for higher education.

It was not just that within a decade the trail had been blazed for a thoroughgoing restructuring of education, but that the debate around schooling and its purposes had been put at the political forefront in the attempted recasting of late British capitalism, as a chief site for the staking out of new parameters of consent.

The dominant political consensus of the sixties, offering social reforms against attempted industrial rejuvenation, had failed to be productive, and had lost its cross-class support in the accentuated version of "modernization". The conservative need was to construct a broader-based consensus of a wholly different kind.

For this purpose, Powellite nationalism, both divisive and anachronistic, never looked adequate.

its insufficiency warranted the now extensive search for a new and "popular" conservatism. The first need of such a politics would be to orchestrate the range of disturbances into a near-total dissent from the prevalent consensus and its typical ideas and ways of working, with which the failures (already, 'crisis') could come to be connected. The hour of *Black Paper*dom had struck.

In *Progress in Education*, Nigel Wright has trenchantly analysed the contradictions and incoherence of the *Black Papers* - their non-sequence, inconsistency and often careless or tendentious handling of evidence. But his intellectual demolition of the essays, in a detached and quasi-legal analysis, seems to strike thin air.

The New Right's most potent version of its own legitimacy rested on a new educational populism: "wherever I go I am besieged by people... anxiously, questioning the present state of British education", wrote Rhodes Boyson. Awareness of an educational "crisis" required no books: "one only needs to talk to pupils, parents, employers and the general public".

It followed that evidence or even consistency



A show classroom during the 1970s; are tomorrow's children going to be any better off?

features

permit. We are invited to choose from the range of goods available, but this is a very different form of "choice" to that available to the citizen (parent or non-parent) in a properly democratic polity.

The main "lines" in the supermarket are to be determined not by an active, participating politics of schooling, but by measures of "necessary" scarcity. The main escape from these constraints, and the direction in which Conservatism impels especially the middle-class parent, is to shop elsewhere, in the luxury markets of private education and a purchased privilege.

More than this, "parental choice", by sanctifying parenthood as the ownership of children, treats children not as present or future citizens, with equal rights to education, but as adjuncts to families, which in their real social existences have markedly unequal resources and powers. The "rights" of children exist, therefore, only to the extent that the social and economic location of their parents permits them.

It is on the dual issues of winning consent and securing economic success that the new politics will be made or broken. So far an old ideological repertoire has been broken up and another propounded. This does not represent a stable acquisition of consent. One vote in May 1979 certainly does not, unless we fall under the spell of the "mandate" arguments, represent popular enthusiasm. It represents, more plausibly, a sense of the weakness of social democratic solutions, and a willingness, highly contingent on ultimate success, to try another way.

The central contradiction here is the conflict between the electoral advantages won and the perceived effects of subsequent policies. If recession continues and deepens, consent sought on the promise of prosperity will rapidly dissipate. Similarly, the appeal to national unity stands in contrast to the deepening social inequalities, in class, gender, race and region, produced by state action, or measured inaction. The rhetoric of freedom looks thin next to policies in which the state steps aside to allow further subjugation to "natural" laws - actually to economic imperatives.

The "cuts" provide the most immediate problem in relation to schooling. The disparity between a commitment to improve standards and yet also to cut expenditure requires considerable negotiation. The fiction of the "non-educational" nature of the cuts has already been punctured. The cuts of course are actually redistributive: they take away from the state schools while giving to the independent sector. They move resources from rural and inner city areas, from working class families and from the unemployed, to the schooling of elite and suburban groups.

Such movements stand in the grossest contrast to the appeal to "parents" as an undifferentiated unity, on behalf of "our" children. The populist appeal presents a further series of problems. A more authoritarian form of state is masked by a populist politics - the state becomes increasingly active in social life as ideology declares its withdrawal in favour of entrepreneurial initiatives.

Part of an attempted resolution of this contradiction is the coding, in rhetoric at least, of limited forms of "consumer control" in certain areas - particularly schooling. Propounded as a search for means by which (wayward) teachers can be held responsible by the "public" for their actions, the actual results have less to do with the involvement of "non-professionals" in schooling than a considerable tightening of forms of direct control - again a greater authoritarianism masked by a populism.

Yet this tendency, the very appeal to parental control, could provide a greater impetus for a genuinely popular politics opposed to the general direction of state policy than did social democracy's reliance on professionalism and expertise.

Educational "Thatcherism", then, is deeply contradictory, and will continue so even if its economic strategies secure some long-term successes. Its failures, however, will be no matter for rejoicing on the left. In the absence of a new and developed socialist alternative with a similar global reach, we will simply be returned to the dilemmas of the seventies, with fewer real resources and less hope.

In many senses the contest between social democracy's unpopular education and Conservatism's capitalist schooling has been lost. The contest between capitalism and discipline, and socialism and education, has not been even attempted.

These extracts are from *Unpopular Education: Schooling and Social Democracy in England since 1944*, published this week by Hutchinson (£12; paperback £4.95). The authors are Steve Baron, Dan Fink, Neil Grant, Michael Green and Richard Johnson.

EDUCASHUN ISN'T WURKING



Conservative Party election poster, 1979, courtesy Saatchi and Saatchi.

Choice contradictions

■ If we look at the structure of the New

Right's ideology of schooling we find twin themes of naturalisation and individualism reappearing. The ideology gives a strong definition to the natural, self-evident purpose of schooling - it is concerned with the competitive differentiation of pupils, and with a provision of a service to industry.

The content of schooling is similarly self-evident (a return to "the basics"), while competitive differentiation only serves to reveal, of course, "natural" differences in ability, application and interests. The individualism of the ideology stresses schooling's importance for individual mobility, and makes education subject to the individualism of the market place.

At one end of the repertoire the concern is "freedom", and the crucial argument is around "parental choice". This perfectly expresses, in a succinct form, all the main themes of Conservative policy: negatively the opposition to Labour's statism and professionalism; positively the belief that market principles in education will secure a greater measure of justice to individuals than will

collectivist interventions.

Under the slogan of "parental choice" it is possible to justify the whole range of structural changes - towards the re-introduction of selection, the competitive setting of school against school, the re-enhancement of private education, the reduction of public expenditure on elementary state services. What the "tax payer" or "the economy" (ie, the middle-class parent and the businessman) can no longer afford, every "good" parent should now endeavour to provide "voluntarily".

Ideologically, the effect of this is to homogenize the parental community, and therefore disguise the grossly unequal social costs of policy. Practically, it means that every source of educational inequality will be immeasurably deepened.

In a more general sense, the stress on "parental choice" is profoundly undemocratic. Parents are reduced to the status of consumers - but on behalf of their children - shopping around in the school supermarkets. They are to have as little or as much control over what is "offered" (or what they can "afford") as their current resources

The party leadership, at first uncertain about the whole shift, became increasingly receptive. Here was not so much an ideology which would either ground or conceal the "cuts", which were fairly remote from *Black Paper* concerns, but lines and modes of argument which began to justify an active restructuring of the whole educational system. They could prepare the ground for a thoroughgoing alternative settlement, as the consensus began to break up.

One crucial step remained before the new right offensive could be politically effective. This was accomplished through the construction of a major media "panic" about schools, which sought to harness widely varying anxieties and discontents about education, and to identify sixties policies as their common cause. The implicit proposed remedy then lay at hand in an alternative agenda developed by the New Right.

We chose to look at the *Daily Mail* and *Daily Mirror* between 1975 and 1977. Despite some important differences there was a shared structure of assumptions and definitions. What was presented as a "debate" was in effect a monologue, concentrating on items concerning teachers' lack of professional competence or the negative aspects of pupil behaviour.

Readers learned, for instance, that "the brutal truth is that standards have fallen" (*Mail*, November 4, 1976) that "literacy in Britain is marching backwards" (*Mirror*, February 7, 1975), and that a *Mirror* reporter had not "the slightest doubt that general educational standards have slipped alarmingly in the past decade or so" (*April* 29, 1976).

Similarly, the papers could employ previous stories (from their own paper or others) as evidence for further reports about, for example, the "mounting backlash against progressive methods" (*Mirror*, April 26, 1976), or the "fact" that "most parents and many teachers believe that children are less literate and numerate than they were 20 years ago" (*Mail*, July 9, 1976).

This was a process of circular validation that enabled the New Right and others to adduce the press discussion as "evidence" of "concern" when demanding the admission of the new agenda into parliamentary debate.

The treatment of counter-evidence was revealing. The Bullock committee's arguments on standards and testing did not fit the New Right agenda and were promptly condemned by the *Mail* (February 19, 1975) as "Whitewash spells 'Whitewash'". Sir Alan Bullock's report on the teaching of English "shrugs the reality in trendy platitudes", while the *Mirror* referred to it as "the Bullock Report on Illiteracy" (February 19, 1975).

While in mass democracies the views of a small group may be dismissed as of minority interest only, suggestions that these minority views have been substantiated in the experience of the general public can become a "fact" which politicians can scarcely afford to ignore. The invoking of "public opinion" provides a platform and legitimacy for the newspaper's policy recommendations: "the people" want something to be done.

In those ways a new set of assumptions may be given a populist character or inflexion. Definitions of the problem become self-evident and self-fulfilling. The gaps and uncertainties of popular knowledge have attained the confident coherence of "public opinion".

One axis of the press's operation was a representation of the right's agenda as rooted in a sturdy common sense - the "reality" to which "theory bears very little relationship" (*Mail*, July 19, 1976), the "simple truths" to which "extraordinary as it may seem" many classrooms would need to be converted by a "big crusade" (*Mail*, April 5, 1975). Inequalities were thereby naturalised, authoritarian pedagogies buttressed, and the signs of the agenda's adoption in policy touted as a "sign of a return to sanity" (*Mirror*, October 14, 1976).

The other, related strategy involved the construction of an image of the popular voice speaking through the press's mouthpieces. There were confident assertions that "millions of parents are desperately worried about the education their children are receiving" (*Mail*, April 27, 1976) and that "parents throughout the country are becoming increasingly frustrated by the lack of discipline and the low standards of state schools" (*Mail*, January 18, 1975). Even more potent was the version of a child's voice, repeatedly appealing for fair treatment: "please don't be trendy" (*Mirror*, April 26, 1976).

Discipline in schools was freely linked to industrial discipline and social discipline. The majority of children were "decent", and "the vast majority of individuals who want nothing more than to get on with their studies in peace" (*Mail*, January 18, 1975) while - in an exceptional moment - "the vast majority was accorded a rationally caused

Phillip Bergso

Documentary life's horrors

Catherine Jones

The Philosophy of Social Research. By John Hughes. Longman £3.95. 582 49032 4.
Sociology and Social Research. By Geoff Payne, Robert Dingwall, Judy Payne and Mick Carter. Routledge and Kegan Paul £14.50. 7100 0626 8.
Social measurement and Social Indicators: Issues of Policy and Theory. By Michael Carley. Allen and Unwin £5.95. 04 310009 0. 04 310010 4.

"The social sciences", according to John Hughes, "have tended to re-examine their philosophical foundations only during periods of crisis". At the present time this is not all that social scientists are re-examining. Messrs Payne, Dingwall, Carter and Ms Payne, for instance, are preoccupied with the prospects of sociologists, and thence of sociology, in Britain. Michael Carley is concerned with the state of the "social indicators" movement in Britain. These are three very different books, but all of them deal with aspects of social research.

The Philosophy of Social Research is philosophy by a social scientist for social scientists: to help them think, or think again, about what they do. As such it may not appeal to the pluralist. It should, however, be accessible to a range of social scientists and social science students who might otherwise be even less amenable to the idea that something as abstract as philosophy has anything of relevance to say to them. The "Positivist Orthodoxy" with its emphasis upon "objective" facts, "neutrality" observed, and its expectations of eventual "scientific" extirpation, is laid low. The "Humanist Alternative" (knowledge is an act of consciousness) is discussed in much of its variety.

There are no easy answers for the eager social researcher. It may be true that "conceptions of the relationship forms of knowledge bear to the world have opened up new opportunities in the social sciences and made for greater readiness to use 'data' in interesting, open and less constrained ways". However it is not clear precisely what this means beyond the fact that we should avoid any "slavish recourse to routine method" in future. But of course,

The authors of *Sociology and Social Research* are more down to earth. British sociology is in crisis

because British sociologists have retreated from doing research into thinking about sociology; because most sociology teaching does not prepare students for actual research; and because the sociology profession is itself in disarray after its swift expansion in the sixties. This book sets out to review the present situation and, on the basis of this analysis, to offer suggestions for the future development of sociology and social research in Britain.

This is, significantly, a four-author book: more integrated than a collection of essays, but less sustained and economical than it might have been with one writer in charge. There is considerable overlapping of material between chapters written by different authors on ostensibly different topics, and the logic dividing parts two and three particularly can be divined only by referring to the collective preface. Inevitably, also, some of these chapters are going to stimulate or command respect more than others.

The opening chapters on the rise and threatened fall of sociology in Britain are interesting if a little repetitive. Since we have been informed at the outset that "Sociology consists of people, and what people do", it should come as no surprise to find lots of sociology professors named here. It is disappointing, however, to find quite so much of this discussion reminiscent of "insider" common room chat.

The tone rises, once we move on to deal with British sociology's attitudes to research ("theory" at the expense of empiricism?) and with the main traditions of sociological research as the authors see them. Geoff Payne's chapter on "Grand Theory and not so Grand Theory", for instance, offers a stimulating discussion of why it is that Marxist sociologists do not on the whole go in for empirical research - either on existing "socialist" regimes or on our own capitalist system. Again, Robert Dingwall maps out the "Ethnographic Tradition" and then the "Ethnomethodological Movement" most usefully for the puzzled outsider.

After this, unfortunately, things seem to slide. Judy Payne's chapter on "Sociology and Policy Research" is concerned not so much to explain a tradition (since modern British sociologists hardly ever indulge in it) as to suggest one way ahead for future sociology expansion. Policy research in all its forms is of course full of difficulties for the conscientious

social scientist. Nevertheless "we would argue that sociologists should undertake policy research including commissioned work as long as they are aware that they are not likely to be doing sociology". This is touching. The term "social administration" is only mentioned once, in passing, in this chapter. There is no attempt to explain where sociology's policy research would differ from, or add to, the traditions of social administration; and indeed, on this showing, leading figures such as Titmuss and Donnison count as sociologists in any case.

The remaining chapters deal with social research in operation and yet tend to highlight the difficulties, for sociologists, of doing research at all. Do we really need a "sociology of social research" to document the full horrors of life "in the field"? It may be that "sociologists seemed to encounter more difficulties compared to other social scientists in doing and completing research", but this hardly seems the best line to take in order to convince the Social Science Research Council of sociology's need for special consideration. Even the call for sociologists to justify public funding by engaging in more "socially useful" research, seems a little late in the day.

Michael Carley's *Social Measurement and Social Indicators* seems brisk and straightforward in comparison. He is, of course, writing on a narrower field and for a lay audience. There are many varieties of social indicator and types of social indicator system to be explored, yet the whole of this debate takes place, by definition, within a solidly "positivist" frame of reference. To be sure, Carley has much to say about the limitations of social indicators and about the reasons why the early hopes of the "movement" were so extravagant as to invite disappointment. Nevertheless he is fundamentally an optimist. Explanatory social indicator models may be so rooted, in time, as to give rise to fully tested social theories, of the middle range at least. In the meantime, however, students will welcome this thoroughly useful overview and explanation of social indicator activity in all its forms.

Is social research as such going through a period of crisis? Is it the same sort of crisis affecting all quarters? Whatever the answers, it seems from this selection that a dose of crisis may be no bad thing provided it isn't too large and it isn't administered too often.

Dance explosion

The Royal Ballet. The First Fifty Years. By Alexander Bland. Jothey Parke Bernet £17.95.
The History of Dance. By Mary Clarke and Clement Crisp. Orbis Publishing £15.00. 0 85613 270 5.

The so-called "explosion" of dance (a tremendous world-wide interest in the art had been going on for well over a decade before the media noticed it) has had its corollary in an avalanche of ballet books, many of them either a rehash of old material or too specialized for general readership. It is a pleasant change, therefore, to consider two recent publications which make a major contribution to dance bibliography, one of them specific, and one of them comprehensive, in content.

Some authoritative reference work was obviously necessary to mark the Golden Jubilee of our national ballet company and *The Royal Ballet, The First Fifty Years* is entirely worthy of the occasion. As the author makes clear in a preface, this account of the company's first half-century is a one-man effort, his subjective assessment open to differing opinions. Nevertheless, Bland presents a very even, generous and balanced view of those disparate elements that have contributed to the Royal Ballet's continued success. That it has had its vicissitudes is undeniable and only to be expected; but that it has, in the main, been remarkably consistent in pleasing an ever-growing public is inextricably linked with Ninette de Valois' far-sighted policies established with the company in 1931: a school to provide a continuous flow of carefully trained young dancers and a repertoire rooted in the classics but performed in parallel with the best of contemporary choreography.

The fluctuating course of the company's history - the early years at Sadler's Wells, the post-war move to Covent Garden, the granting of a Royal Charter, the directors who succeeded de Valois and the policies they followed, the successes and failures of the repertoire, the comings and goings of the dancers - all is set out in a prose style which manages to retain a vitality that sustains the reader's interest as he ingests the historical record.

The book is very well illustrated with colour and black and white photographs and, while it questions the prominence given to some, includes several less-than-familiar pictures of historical interest such as Chiang Yee's exquisite designs for Robert Helpmann's *The Birds* in 1942 and Leslie Hurry's beautiful 1943 fantasy-Gothic setting for *Swan Lake* (I wish we had it today).

Edward Thorpe

As well as recording the rise of the Covent Garden company the book deals with the history of the second company, now re-established at Sadler's Wells, and with the development of the Royal Ballet School. There is also a useful explanation of the administrative side of the organization and an invaluable appendix of statistics detailing all the productions to date, the original casts and company histories. Finally, Bland analyses with great insight - and affection - the company's aesthetic ideals, its national characteristics and its likely response to the challenge of the next 50 years. This is an expensive book but required reading for anyone who cares about the history of British ballet.

That dynamic duo, Mary Clarke and Clement Crisp who, in recent years, have written several of the best books on dance, have now attempted the impossible - and brought it off triumphantly. *The History of Dance* is exactly that, a comprehensive examination of man's compulsive need to dance, from the first records of primitive god-worship to the discos of today. This immense assembly of material is presented in a typically attractive manner, beautifully illustrated and written in crisp (no pun intended) elegant prose leavened with wit and laced with a perceptiveness that comes only from great knowledge and wide experience.

Most readers, like most dancers, have areas of interest that absorb them to the exclusion of others (there still exists a distinct dichotomy between the followers of classical ballet and modern dance) but every evolutionary fact helps to create an awareness and understanding of those various dance-styles most commonly presented in the commercial theatre. After all, many of the most popular works draw upon esoteric source-material or transmute an alien culture into something relevant and entertaining for our own society. Even Pina Bausch, that most formally aristocratic of choreographers, found inspiration in the temple-dancers of India.

Clarke and Crisp record and comment upon every major dance-culture (perhaps some small dancing sect on a Pacific atoll has escaped their attention, but I doubt it); primitive and ancient; religious; European folk-dance; Eastern dance; classical ballet; modern dance and dance in films and television. It is a tremendous undertaking, splendidly achieved, and if any dancer-lover possessed only one book on the subject this would have to be it.

Edward Thorpe

Cricket, carnival, Celtic

Identities. Edited by Geddes Thomson. Heinemann £3.50. 435 14901 6.
Heritage. Edited by Esmer Jones. Cassell £3.50. 304 30648 7.

"Home is where we start from" - and both these anthologies for secondary school children offer a selection of local material for use in reading/comprehension classes, in general the kind of material which starts discussion of the sociological rather than the imaginative sort. Mr Thomson especially has relentlessly roved *Identities* in a very gritty patch of West Scottish life; Mr Jones's *Heritage* is a more joyful and humorous reflection of the Caribbean.

Heritage does have one severe limitation, however. It is produced for use in the Caribbean and so, while much of the material is absorbing and well connected, quite a lot of the settings and dialogue may be geography-lesson exotic to those from non-West Indian families. Its writing, or rather its Writer, who in chief is the splendid V. S. Naipaul, is many-faceted, and if the accompanying questions are rather more mundane than the subject-matter, that is less important. Death, cricket, col-

our prejudice towards immigrants in Britain, making money and carnival are dealt with in stories which are often amusing and rarely sad.

A very sensible solution to the Creole/Standard English difficulty is suggested in an introduction to one of Louise Bennett's poems. Ms Bennett writes in Creole. The editor then comments, "You are learning to speak and write what we call Standard English. You learn this dialect because it makes you understood wherever English is used and because it is the language of books. Though Standard English is a gateway to the world, we can be proud of the dialects of the islands for they are our heritage; they are our own".

Heritage is divided into sections, "Places", "People and Families", "Work and Leisure", "In a Strange Land" and "Inheritance", which are most illustrative of the life of black people in the Caribbean, but do contain some material on the East Indian and Chinese communities as well as some historical pieces about colonialism. The low-key attitude of the editor is refreshing. Introducing "Larry" he says, "Larry also meets prejudice. We shall meet it again in other extracts in this section. Remember, though, that no one seems

to like strangers moving in and there are experiences of this in the Caribbean. Prejudice is always hateful and hurtful". This sort of explanation is clearly only sufficient for the lower end of the secondary age-group, but it is welcome.

Identities is rather more angry. It is an anthology for reading rather than comprehension - there are no suggested questions, the type is smaller and the layout rather reminiscent of a small literary magazine. On the whole, the writing *per se* is not inspiring, but the subject matter is so strong in regional flavour and language that it should hold the attention. Celtic and Rangers, teenage dating, slum housing, fights and growing up in Gles Ciu (sic) - ironically, "the dear green place" in Gaelic - the literature of a place charged with "direct british strength, almost warm" (as Archie Hind says) with some more tender touch in the sections on "Street Games" and "A Sense of Place" is well represented. For rather older students or for the teacher's reference, the editor's notes are mostly suggestions for further reading and elucidations of the themes presented.

Victoria Neumark

An accelerating theatre-go-round

Harrop's Theatre Workshop. By Robert Leach. 245 53497 0.
Pantomime Playtexts. 245 53498 9. £2.60 the pair.
Medieval Theatre. 245 53499 7. £1.95.
Medieval Mystery Plays. 245 53500 4. £1.25.
Shakespeare's Theatre. 245 53622 1. £1.95.
Shakespeare Playtexts. 245 53621 3. £1.25.

With these new additions, Harrop's Theatre Workshop moves on to larger and more popular ground. It is a series of illustrated, large page booklets (of some 32-48 pages), bound in pairs, one being a workbook which introduces the theatrical genre or period under review, and its companion being a selection of scripts or extracts of that type.

So far the series has covered the early folk plays, Elizabethan theatre, Victorian melodrama and Punch and Judy. Now come the mystery plays, Shakespeare and pantomime. Of these, easily the most successful is the latter. Eminently practical, the workbook provides advice and encouragement to groups contemplating production of their own home-grown pantomime and constantly re-

minds us of the pantomime's long and varied history as an ever-popular entertainment. The playscript volume offers basic scripts for *Old Mother Hubbard* (otherwise known as Harlequin Jack Horner) and *Cinderella*. *Medieval Theatre* takes us into the world of the mystery plays. The workbook tells us about the ways the plays were staged and introduces the themes of the plays printed in modernised versions in the companion volume, namely *Noah* or *The Deluge* (from Chester), the first Shepherd's pageant (from the Wakefield cycle) and the York version of the crucifixion.

Any brief introduction to Shakespeare is bound to seem superficial or at least idiosyncratic. In this booklet, Robert Leach appears a little overwhelmed by a need to be academically respectable as well as practical, with the result that features (excellent in themselves) on topics such as the divine right of kings and the imagery of blood in *Macbeth* get in the way of the more urgent business of moving the text from page to stage. However, there are useful background articles on Shakespeare's fools, music and dance, and the sub-text, all of which will help in any theatrical work on the selected playscripts.

David Self

Let the past times roll

A History of the Modern World. By Richard Poulton. Oxford University Press £3.95 199 0365 8.

World history text books roll out faster each year. Where several of the best recently published are intended for sixth form general studies as well as for use with an examination syllabus, this one is geared specifically to the O level student. In response, perhaps, to the exigencies of O level examiners, it is factual and concise, but it is the author himself who provides the lucidity to make it a highly readable and interesting text. One of his aims was to avoid the "unrelated islands of material" with which those studying a world history syllabus are often presented. To him and all navigable, his cross-references provide an easy means of

island-hopping. The tales all tally and the plot falls neatly into place, as juggling skillfully with its complexities, Richard Poulton pulls out the coherent chapter sequence and paints an integrated picture of the whole world. Rather more detail is given for the history of Britain and the West than for other areas, on the principle, presumably, that it will not profit a candidate to gain the world, if he lose his own roots.

This is a positively written book, with firm judgments ("The Hunger Marches of the 1930s were inspired by frustration more than by starvation"). Boldly crystallizing the issues, with some panache the author even formulates that old teaser the Eastern Question, which defied solution and usually defied definition in the classroom. "Who will take the place of Turkey?" was the vital question; he claims, though losing his nerve somewhat about 80 pages on the subject, this question into five more. He has done well in the history writer's

favourite sport of quotation, quarrelling, showing us Trotsky consigning the Mensheviks into the "dustbin of history", unaware how soon he would be tossed there himself, and MacArthur joining him in it, because he would have started the wrong war at the wrong place at the wrong time and with wrong enemy. This is the kind of vivid reference which makes events memorable.

What could be improved is the visual lay-out of the book in which it is not easy to find a way around. Although chapters are sub-divided into sections, the section/headings do not figure in the contents list; and the sections themselves consist of the solid blocks of prose which O level candidates tend to find daunting. Marginal trigger-titles, on the lines of those used in these years by Richards and Hunt in *Modern Britain*, might well have made all the difference.

Jessica Saraga

Children's Literature

The heavy hand of an English editor

For Mbatia and Rabeka. By David Miallu. Macmillan 80p. 333 28162 4.
On the Road. By Kalu Okpl. Macmillan 74p. 333 28496 8.
Too Cold for Comfort. By Jide Ogontoye. Macmillan 71p. 333 28497 6.

The Pacesetter series of fiction for young adults is marked by an interesting diversity of plot, but the hand of (presumably) an English editor lies heavy on the style. *For Mbatia and Rabeka* and *On the Road* are good examples of the Westernization of African culture. The second is the least interesting of the three novels, being straightforward and, at that elementary level, satisfactory: crime thriller. *For Mbatia and Rabeka* has a classic triangular situation, between one woman and two men. In its organization, however, it has some

distinctly African elements, especially at the end, where the twist is not of a variety that probably would have been countenanced by a fully Western sensibility.

Too Cold for Comfort portrays a characteristically African contest between polygamous and monogamous ideas. A marriage is destroyed by a bride's obsession with purity and morality, and her husband tempted to take on another woman as well. The author's identification of some peculiar ideas of purity and morality with certain Christian sects is accurate, though the publishers seem to have confused sectarian views with mainline Christian ones. Ogontoye's view of the point seems to be that monogamy is potentially more richly satisfying, but that various human failures make polygamy a messy if necessary compromise.

Prabhu S. Gupta

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Calendar of crime

Tales from the Newgate Calendar. By Rayner Heppenstall. Constable £8.50.

One argument for the abandonment of capital punishment is that it does not deter. This is supported to some extent by the annals of crime in the eighteenth century, when death was the penalty for many offences that continued to be committed. ("To some extent" because it is impossible to tell what the crime rate might otherwise have been.) How much ordinary citizens feared the worst is indicated by the precautions they took.

Heavy iron bars securing outside doors as well as locks and bolts, ground floor windows either barred or fitted with wooden shutters also made fast with horizontal bars, bolts to be drawn on the passage side of room doors as one retreated up the stairs to bed - the farmhouse where I live speaks eloquently of the eighteenth century. And when one looks inside the *Newgate Calendar* in whatever form one sees why? Romance and the novelists have given the highwayman and his fellows a glamour altogether spurious: the best of them seem to have been brutal and vicious. Captain Kidd is a muddler, and only Jack Sheppard's capacity

for escaping gives the reader a thrill. The pleasures of this selection, then, are chiefly incidental, and independent of the *Calendar* proper. One is the marked discrepancy between the popular appetite for horrors (then as now) and the often fair, and indeed sympathetic, tone of some of the judicial utterances quoted. This is from the judge sentencing Mary Blandy in 1752 for poisoning her husband: "You have had a long and fair trial, and sorry I am that it falls many lot to acquit you that I am now no more at liberty to suppose you innocent than I was before to presume you guilty." The account of the Cock Lane ghost conspiracy, though the case is not in the *Calendar*, is even more heartening. It is mainly from an official transcript of the Guildhall trial in 1762, and shows incidentally how barristers have always found it hard to resist a joke: "This, when a witness testified that he had asked the supposed child, medium how many pieces of money he had given away and that the answer was a single knock, 'Counsel said he should have asked what number of miles it was from London to Newcastle. It would have been the likeliest way to find them out'."

One conspirator was sentenced, not only to two years in jail but also to

stand three times in the pillory. "The mob treated him with indulgence and took up a collection for him. He had, after all, provided them with entertainment. Just to prove that our ancestors were much the same as us, note that the red-haired servant girl in the case is always called 'Carrots'."

High life, too, produces its offenders, not necessarily political ones, as might be thought from the history books. The seconds in the notorious duel between Lord Mohun and the Duke of Hamilton, for instance, were both suspected of killing the principals; but only one was brought to trial. The fourth Earl Ferrers, who sounds a nasty customer though one can almost hear a psychiatrist explaining him away, was hanged for murder. The Duchess of Kingston, Countess of Bristol, was tried in Westminster Hall for bigamy (hence the dual title used above), and we have descriptions from Horace Walpole and Hannah More. For some time the better part of Scottish male-factors were liable to be executed with a less sophisticated guillotine, named the Maiden, modelled on a machine exclusive to Halifax and introduced to Edinburgh by the Earl of Morison, later himself one of its victims. Among those who escaped it



was "Alexander Balfour" (in fact Robert Balfour), son of Lord Balfour (in fact Lord Balfour of Burleigh), who slipped out of prison by changing clothes with his sister, and who died in 1757, not 1752; the editors of the *Calendar* concerned were lawyers, but evidently unreliable as reporters.

It is surprising that it did not occur to Rayner Heppenstall to wonder

Jan Stephens

resources

Basic grammar on a language ruler

Plastic rulers were sent to nearly 10,000 junior and comprehensive schools recently. They were designed not just for maths, but also as a language aid. The rulers were developed by Mr Bruce Nicol, who is a languages master at Gloucester School, a comprehensive in north west Germany, and they contain all the basic grammar for either French or German. Italian and Spanish ones are to follow, and there is also an English version for foreign students.

The idea is to reduce the time needed to look up grammar which is scattered over many pages in a book. On the French ruler, lists of pronouns are followed by verb endings, common prepositions and the objects used after them. The other side lists 16 common verbs in their various tenses.

On the German version, one side is entirely devoted to the declension of articles and adjectives in the four cases, while on the other there are sections on pronouns and verb endings.

The notes which accompany each ruler explain how to use it and give further information on various points of grammar. The German notes include comprehensive lists of the most common regular and irregular verbs with examples of how they are used.

Mr Nicol produced the ruler because he became concerned that pupils, particularly the less academic, often found great difficulty in grasping the grammar. First, he developed a language course which is suitable for adults as well as children. Its main feature is a series of plastic wheels which revolve on an LP-style disc. Still a prototype, it contains 2,500 words as well as grammar rules. The ruler is a spin-off from it, and is already in use in many of the Forces schools in Germany.

The rulers, which come in a case, are available in 20cm size at 95p or 30cm at £1.20. They can be ordered through Educational Mailing Services, The Old Rectory, 1600, Victoria Road, Margate.

Careers centres, a new guide

Nearly 30 centres providing resources for careers teachers and others are listed in a new national guide. It has been prepared by a working party of the Schools Council's careers education and guidance project and published by the National Institute of Careers Education and Counselling. Between them the centres offer a range of materials concerned with education and industry liaison, social and life skills, health education, moral education and political education.

The list indicates which material is available in each case, and the audio-visual facilities offered. Some centres can also provide specific local information as well as more general data about work, curriculum materials, and general information about careers guidance. The list costs 50p plus postage from Mrs Barbara Piller, Resource Officer, NICEC, Hatfield Polytechnic, Bayfordbury House, Lower Hatfield Road, Hatfield.

Royal Free tour

Teachers, careers advisers and sixth formers preparing for medical careers are to have a chance to meet staff and students at the Royal Free Hospital School of Medicine on July 4. The programme will include: discussions about admission, the medical curriculum, career structures and a tour of the hospital.

Further information from 'The Postgraduate Secretary, The Royal Free Hospital, Pond Street, London NW3 2DA'.

Liberation's new video catalogue

A new video catalogue is now available from Liberation Films. This company specialises in film and video material for social studies and related courses, and they work with schools and colleges, tenants' associations, ethnic minorities and so on. Liberation Films Ltd are at 2 Chichester Road, London NW2 3DA.

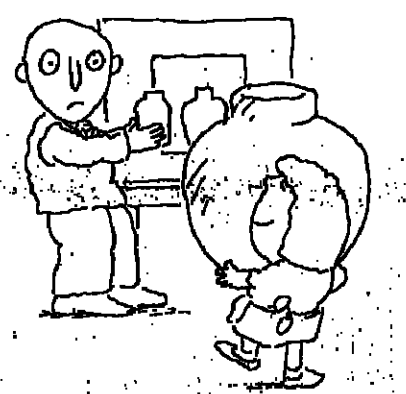
When the heat is on, a foolproof operation is vital

David Kilpatrick surveys furnaces for use in science and crafts

The main uses of small electric furnaces are in industry, scientific research and higher education. Although the manufacturers of furnaces recognise the importance of secondary schools, comparatively few departments can justify the average cost of around £500. Even in industry, furnaces are purchased for specific tasks, and not as additions to available equipment.

There are two primary types of small electric furnace. The traditional "muffle" furnace uses a central electric heater element wound to manufacture and install, but like any exposed element will eventually fail. Muffle furnaces for school use often have cheaper elements with simple routines to change them, but some make require a service engineer to replace the element safely, at some cost.

The "slab" furnace uses refractory side wall panels of silicon carbide with embedded diffuse heating elements. Instead of a single element, a typical furnace like Carbolite's ESF 2 (Educational Slab Furnace size 2) uses four of these lower power slabs, each replaceable individually and more cheaply. The heat is also more even, since it comes from all round the sides of the chamber rather than from a single source.



"The slab furnace gives extra safety and foolproof operation" says Carbolite's technical director Ian Whitney. "A major consideration is whether or not the furnace can be run off a 13-amp power point, and in the case of the ESF 2, the consumption is only 2.5 Kw. Our largest ESF, model 3, requires 3.2 Kw, and can be run from a 30 amp ring main, but the cost of fitting the 30 amp socket and the extra cost of the furnace may make a lot of difference."

This question of power is one of the main reasons why furnace manufacturers such as Carbolite, Cestrat and Lenton Thermal cannot concentrate on schools. Industry and universities do not usually face the problem of meeting electricity supply demands; the largest furnaces may consume 40 Kw on three-phase supply, yet present no difficulties in an industrial workshop. Very few furnaces use less than the maximum of 3 Kw available from a normal 13 amp socket.

To keep the electricity consumption down, the maximum temperature has to be limited to a reasonable 1100 or 1200 Celsius. This handles nearly everything needed in normal investigation and demonstration of the properties of metals and combustible substances. Even the larger research furnace are limited to 1600 Celsius, as above the

1200-mark, the type of insulation needed to avoid breakdown and retain the heat becomes very much more expensive.

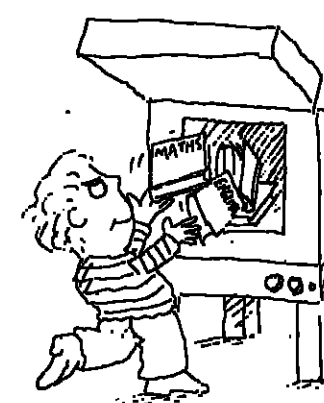
A modern educational furnace should have a double-skinned wall so that the external temperature stays low, and use no asbestos in its construction. Safety locks prevent the door from being opened with the power on, but it can still be opened (from necessity) when the furnace is hot.

Few preparations are needed to install a furnace, other than to ensure that the wattage suits the power supply available, and that an adjacent piece of equipment does not add a further load and blow the 30-amp circuit fuse. The physical size of research furnaces has to be small, or they would be prohibitively expensive.

A typical model giving 1200 C with a controlled ventilation outlet (needing no kind of air extraction in the room unless it creates gaseous by-products) would cost £500, and give a chamber around 9 x 15 x 18cm. The benchtop stands on should not need any kind of heatproof surface, but nearby work surfaces should have suitable ceramic surfaces to allow hot items to be put down.

Some new furnaces are cheaper. Carbolite now have a muffle furnace with a low-cost element, the EML, for under £300. The life of the element is impossible to state positively but "around three years" can be expected from normal use. Cestrat have twelve models suitable for educational use and recommend their MF1s; all the models are in the range £500-£550, but have slightly differing specifications.

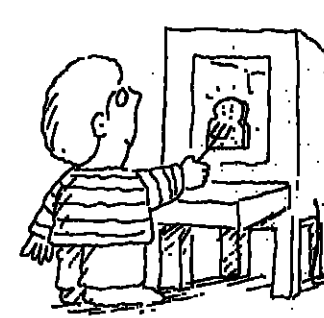
There seems a very strong case for a crossover between science and crafts departments in the use of a single furnace. The obvious use to fuse ceramic glazes on jewellery is within the small capacity limit of the furnace. Annealing small glass objects is also possible with suitable temperature



control - though a purpose-built furnace for this purpose, with a constant temperature of an even 750 C by fan circulation, is well out of any educational budget.

Apart from the manufacturers mentioned above, there are dozens of small makers who can put good quality furnaces together because it is a hand assembly rather than mass production job. Gallenkamp, of the educational lab supplies distributors, are alone in manufacturing their own make of furnace, and possibly have closer contact with the schools' needs as a result. Carbolite's marketing director admits that although many furnaces go out to schools, the company rarely gets to know exactly what they are used for, in strong contrast with the industrial research markets where the final use often determines the custom-design of an individual furnace.

Major suppliers include Gallenkamp, Griffin & George, and Philip Harris Ltd.



Farming traditions

by Gillian Thomas

A barn with small holes in the wall for cats to get in and chase out the mice, a 200-year-old working dairy, and a beautiful walled kitchen garden, are all features of Cogges Manor Farm Museum, where aspects of farming at the turn of the century are being recreated by the Oxfordshire Museum Service.

The Edwardian period was chosen because it was the last period before traditional farming techniques were changed by the impact of the petrol engine, and because tools and equipment from the period are still relatively easy to find. The fact that people still remember them being used is an attraction in itself.

The Manor was built in the thirteenth century, and was extended in the 1600s. The stable and barns date from the seventeenth and eighteenth centuries. They have hardly been altered since then.

However they were in need of restoration. This is being carried out in stages using authentic materials and methods whenever possible. Two rooms, for example, await a supply of Stonefield slate which will only be come available when other buildings are pulled down. The original quarry five miles away, was closed several years ago.

So far two rooms in the Manor have been reupholstered. Both are on show: the Back Kitchen and the Main Kitchen. In the former, two servants used to do the laundry and bake the bread. The oven behind the fireplace still works well, though neither it nor the ornate mantle nor the copper boiler were

labour-saving by today's standards. Among the original gadgets in the Main Kitchen is a huge cooking range where members of the local Women's Institute regularly give demonstrations of typical farmhouse cookery.

Butter making is also regularly done. Using wooden hand-churns makes it a lengthy process. Full explanations are available from explanatory captions.

The old methods of harvesting and threshing are illustrated with photographs and diagrams alongside the old tools on display in the stables. Restoration work has begun on the main barn, which were built when farming methods became more efficient and so extra space was needed to store crops. Eventually the farmyard area will be used to show the development of farming in Oxfordshire.

Workshops on each section of the farm - the kitchens, dairy and farmyard - are issued free to school parties, who must book in advance. There is also a historical and nature trail round the gardens and meadows. To complete the picture, a number of farm animals are kept there, including some rare Oxfordshire Down sheep, and donkeys, horses and cattle on loan from local farmers.

Cogges Manor Farm Museum is open between April and September, with lectures or demonstrations every morning for schools. The entrance charge for more than 10 is 25p a head. Guide books cost 60p. Bookings can be made through Oxfordshire County Council, Department of Museum Services, Fleetham House, Woodstock.

Significant invisibility

by Jackie Hardie

Camouflage and Colouration in the Animal World. By Dr. J. Feltwell. Focal Point Audiovisual Ltd, 251 Copnor Road, Portsmouth, Hants. £6.25 plus postage and VAT.

These two topics can be really interesting in animal biology, capable of being studied by any age group to the depth. It would be hard, though, to construct a coherent lesson from this set. The slides, credited to the Wildlife Matters Slide Library, are apparently a random collection, which touch on various aspects of colour and camouflage, without covering either topic adequately.

There are too few examples of the various types of camouflage for younger age groups, and not enough detail for older pupils. The slides are even listed under their classification groupings of the animals rather than as examples of particular significant points. It is a pity that more British examples are not included to stimulate younger pupils to look about in their own area.

The twenty slides cover thirteen insects. Some are well photographed showing a lot of detail; two frogs, a lizard and an alligator; and an albino peacock are included as mammals along with the giraffe and the impala. The accompanying booklet, written by Dr. Feltwell, is not very helpful. Among the examples of col-

our significance shown is sexual dimorphism illustrated by the male and female of a lizard, but the female is not shown as a slide for comparison nor is it described in the notes.

The impala is used as the example of counter-shading - another clear slide - but the explanation given of the survival advantage of this adaptation makes no mention of the bright sunlight and shadows of the animal's habitat. Instead it offers the idea of predator viewing the impala from above or below. No examples of possible predators are suggested.

While the Tyndall Effect is often met within animal colouration, the reference to it here as a means of achieving green colour by the interaction of yellow carotenoids and blue pigments, rather than structural blues, is inaccurate. Three types of insect camouflage are described, which is quite useful, but the occasional references to evolution are helpfully worded in implying determinism rather than chance.

Dr. Feltwell suggests that a given list of basic points, for example "camouflage", "mimicry", "crypsis", should be clarified with the students before showing the slides. Surely the slides should be used to teach the points! A short list of books for further reading is included.

It is doubtful whether teachers will feel that this set and notes contribute much to their selection of teaching resources.

Body language

by Claudette Everly

Know Your Own Body. Parts 1-5. Mounted slides £10.95 for each unit. Cassettes, £5.95. Teaching notes, 80p per part subject. Camera Talks, 31 North Row, London W12 8EN.

A nurse and a teacher have written these five slide/tape programmes to provide a very simple course in anatomy and physiology for 9 to 13 year olds. They have tried to reduce the subject to its "bare essentials", and they claim to have avoided technical language. The five programmes are "The Heart, Circulation and Respiration", "The Digestive and Urinary Systems", "The Nervous System and Special Senses" (2 parts) and "Bones and Muscles". The number of slides in each unit varies from 21 to 34.

Most of the frames are colour drawings, a few are colour or black and white photographs. The cassette commentaries last between 10 and 15 minutes, they are clearly spoken and, though they are pulsed, there are short pauses in which the frame number is given so that the slide set can be used with any type of slide projector. The sound quality is variable. Teacher's notes for each unit give a transcript of the commentary, background notes, information, and ideas for follow-up exercises.

The information is packed with jargon, which assumes that all teachers of 9 to 13 year olds have some biological knowledge. Some of the suggestions for follow-up, such as operating the tendons of a chicken's foot and investigating vibrations, could be fun. Others, like getting 9 to 13 year olds to draw a skeleton, will be difficult. Some, such as the complementary work on reflexes, will be hard for teachers to explain.

The drawings on the slides are extremely simple - so simple that there are inaccuracies, and many have very little resemblance to the real thing. The diagrams of the heart section shows the walls of the four chambers to be of equal thickness. The innervation of the intercostal muscle is shown as a series of short, green horizontal lines from the armpit to the hip on the outside of each side of the body.

A few attempts are made to show the position of the major organs inside the body, but there is hardly any effort to display three-dimensional structure or indicate size. A child could easily think an eyeball is flat, and the same size as the heart or a villus in the intestine. There are a couple of photographs of real organs and of organs in situ; there is a gruesome cadaver with thorax opened, a human heart and brain.

These are out of keeping with the rest of the illustrations in the set, and whilst the teacher's note state "teachers will have to judge what reply to give should pupils ask the source" (of the specimens), the inclusion of such photographs could be very upsetting. Value for money is questionable, for in all the sets at least one slide is duplicated in the sequence. In programme two (total, 23 slides), the slide of an outline of the gut is used five times.

The commentary is loaded with errors and the authors have failed to simplify complex topics according to a section on teeth we are told "four attacks enamel" and about the eye that the "pupil reacts to light".

Although one of the stated aims was to avoid technical language, the commentary is peppered with terminology such as urinary, menarche, oestrogen, and tongue papillae. In other places, however, they have avoided such language to the point of confusion.

The authors justify the teaching of these complex topics by stating that the human body is the ideal place to begin the study of science. There is no evidence of the process of science anywhere in the units. Moreover the units were written from a very academic point of view. The impression is of a diluted "nursing course" produced by people who have lost their own sense of wonder and joy of discovery.

The slides are well produced and centre upon social needs and

Introducing inheritance

Victoria Neumark on the 'Origin of Species' exhibition

Origin of Species. Permanent exhibition. Natural History Museum, Cromwell Road, London SW7. For school visits contact Visitor Services Section Tel: 01-589 6323 extension 759. Sixth form worksheets available.

When canvassing Origin of Species the staff at the Natural History Museum were startled to find that very few students in the target age-group of fourth to sixth years understood natural selection in evolution. On the contrary, Lamarck's largely discredited ideas of the inheritance of acquired characteristics were widely, if muzzily, held. This attractive new exhibition should leave anyone above the age of 15 with a clearer idea of what Darwin had to say, and why most of it is still regarded as so important.

Although the museum has included very little genetics and has concentrated on familiar animals to provide the examples, there are none the less many difficult concepts to grasp and the extensive use of diagrams, push-buttons and video as well as the more standard tape-slide and film showings should be appreciated by visiting teachers.

By constantly referring to Darwin's observations on the Beagle, the organisers have avoided straying too far into the wilder shores of neo-Darwinism, though the final section does touch on other evolutionary theories.

An introduction to "The problem Darwin solved" gives the mid-

Victorian setting of Darwin's study - providing a useful historical reminder - and demonstrates how selective breeding of domesticated animals gave him a clue to his theory. The second and third sections, "How we recognise species" and "Species in nature" cover various methods of classification: by appearance, smell and song. The chaffinch and willow-warbler, nearly identical in appearance but different in song, provide a charming example. But, as the examples of acorn and oak, black man and white man, point out, some species vary.

To illustrate the most workable definition of a species, the breeding group, which "depends on the way organisms behave and is never a matter of personal opinion" the hybrid and sterile mule is compared to a tribe of prolific wasps. The limitations of even this definition are not skirted - breeding behaviour will not help to categorise fossils or self-reproductive organisms like garlic.

"More than enough offspring" and "Environment - the struggle to survive" explain clearly why it is that heavily breeding groups like cockroaches don't outstrip everything else and control the biosphere. (A very attractive diorama shows moles and blackbirds competing for worms) while "Introducing inheritance" and "Variation and inheritance" reminds visitors that characteristics are inherited, and yet that inheritance may vary. A very simple push-button game illustrates how a red cow and a white bull can have offspring with four pos-

sible colour patterns. Here minimal genetics are touched on, but the theory of "Natural Selection", properly introduced in the eighth section, does not depend on genetics for its formulation. Such genetics as Darwin used were rudimentary and faulty.

As well as the famous examples of the pepper moths in Manchester, the incidence of haemophilia and sickle cell anaemia in human beings are used to demonstrate variation and selection, and that well-known catchphrase of "the survival of the fittest" can be tested by an ingenious video game which involves the player in tracing the fortunes of two sets of pale and dark mice on different coloured backgrounds. It is a pity that the exhibition is rather cramped, so not many people can participate at the same time.

The last two sections, "How are new species formed?" and "Origin of Species" are treading on more contentious ground and give a rather simplified explanation of an interplay between geography and spontaneous mutation. An excellent film, which uses animation and photography from the Galapagos Islands, where Darwin spotted his thirteen types of differently adapted finches, is more helpful than an exhibit showing how man has produced sweeties from a cabbage-turnstile cross - though that does tie in with the examples from domestication at the beginning of the exhibition.

Origin of Species, particularly if used in conjunction with its accompanying book, should provide just the right corrective to half-formed, misinformed ideas about evolution. While the surface liveliness of the exhibition might seem almost distracting, in fact it is so well devised and held together by its insistence on Darwin's own discoveries and theories that it succeeds in holding and developing a scientific interest.

The account of Trafalgar itself is excellent: the high point of the unit, handled with an obvious relish by the author Lawrence Jay. Nelson's initial tactics are explained, and the events are described boun by hour. Familiarity does not blunt the story and it is well told here with the aid of diagrams, models, and Nelson's own observations on the passing action. Trafalgar in this current account is



From the book of the exhibition. Short-legged rams.

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Personality and heroics

by Gorman Stafford

Nelson's Victory. 39-frame filmstrip with notes, £6.25. Optional cassette, £2.50 plus VAT. Focal Point Audio Visual Ltd, 251 Copnor Road, Portsmouth, Hants.

This is a straightforward account of the ships and men in Nelson's navy and of the events which culminated in the victory of 1805. National and personal heroics of this kind tend to be out of favour with historians. Napoleon may very well have "reckoned without Nelson" and there may be legitimate comparisons between 1805 and 1939, but we have not been putting it this way recently.

1758 was the year both of Nelson's birth and of the approval of the laying-down of Victory. The filmstrip explains this and continues with short sections on Nelson's early career, on the state of the European war after Amiens, and on the pursuit of Villeneuve to the West Indies. The scene is thus set for detailed studies of life on board the Victory and of the Battle of Trafalgar.

Hardship, inadequate rations, low pay and long periods at sea were routine features of life on board the Victory. There are good descriptions of the operation of the press gang, the intolerable living conditions, daily schedules, grog rations and of punishments. A clear distinction is made between officers and men, the former being drawn largely from the families of the gentry in the south of England.

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primarily about ships and men, and the political implications take second place. France was broken as a maritime power and Napoleon was contained on the continent. England was freed from the threat of invasion, the Peninsular War followed and Wellington, supplied by sea, was given the tactical mobility he wanted.

The unit concludes with a short summary of the subsequent history of HMS Victory. James Clappman, the last of the Trafalgar ratings, died in Dundee in 1876 at the age of 91. The Victory, restored to her Trafalgar condition, has spent most of this century in dry dock at Portsmouth. It constitutes one of several Nelson memorials in this country which serve as centres almost of pilgrimage.

The accompanying notes are sound. The factual information is generally illuminating and occasionally overwhelming. The Victory is 227 feet long, mounted 104 guns of various calibres, and fully manned it carried 704 men. The heaviest guns were the 32 pounders with a range of 2,610 yards and at 1,000 yards could penetrate 31 1/2 inches of solid oak. Sailors received one-third of a pint of rum mixed with water at mid-day and again in the evening; in British harbours they were allowed two gallons of beer a day - there is much here to appeal to youthful imagination.

media

Soluble problems

Andrew Rothery reviews a primary maths series

ETV
Mindstretchers
BBC. First broadcast May and June, 1981

This summer saw the start of *Mindstretchers*, an imaginative new series for 10-11 year olds. Each programme introduces a problem to pupils in a brief five-minute burst. A second five-minute programme is broadcast a few days later to provide discussion and solutions. In the meantime, with help from the teacher, pupils are expected to work on the problems.

The five problems in this series centre on weather forecasting, archaeology, calendar construction, environmental planning and bridge-building technology. The problems set are not explicitly mathematical, though most involve mathematics and would greatly interest teachers developing work in applications of mathematics. However, the programmes go much further and illustrate the methodology behind a number of broadly scientific disciplines. They do this by involving pupils in a scaled-down realistic problem which can be worked on in school.

The first problem asks pupils to make a forecast of the weather based on assumed conditions. The various graphs and information needed to make this prediction are also provided. It is perhaps unfortunate that this very first programme is quite complex, though it is within the capability of most pupils if some help is given.

The material is presented at great speed and it would be essential for the teacher to re-present it in the classroom using the script in the teachers' notes. Nevertheless, the content is excellent and constitutes a very interesting activity, giving also a good flavour of how weather forecasting is done.

The second problem is in complete contrast. Fully dramatised, it shows an archaeologist "discovering" the remains of what looks rather like an old air-raid shelter

and, among other things, a brick wrapped in underwear. Pupils have to figure out what the remains are, and how the objects were used.

This was the least realistic of the programmes. There were hints that we were seeing how archaeologists worked in general, but pupils will have learnt more about modern history than about genuine archaeological methods.

"Rethinking the calendar" was the theme of the third programme, and this presented a creative mathematical task: to construct an improved version of our complicated calendar. The programme explained at a careful pace how the calendar has evolved. This is an exercise in exploratory thinking touching on maths and science which would be well within the capabilities of the pupils.

The last two programmes cover environmental topics: housing and bridges. Pupils are asked to design a housing estate using model houses of such a size that ten houses can be built on a sheet of A4 paper. The programme gives some ideas, nicely illustrated by film of real houses. The follow-up programme shows some real pupils and their designs. This topic reveals how planners think, and provides material for discussion on aspects of housing.

The bridge-building programme is rather like a Junior *The Great Egg Race*: pupils are asked to make a model bridge which would span a distance of 500 millimetres and support a weight of 500 grams. Only cardboard, string, glue and straws may be used. The programme explains some simple technology in the designs of different bridge structures.

Most of the programmes set problems which have a variety of sensible solutions. They help children learn to apply their knowledge, and with the help of the teacher and the teacher's notes, there is excellent material that gives factual information and shows some of the thought processes that underpin some of our uses of science.

Tomorrow's technology

by Jim Anthony

ETV
Today and tomorrow
BBC TV

This series of four programmes for the top of the middle school offers some visions of the future which should arouse children's interest in the technological developments that may affect their adult lives.

It is not a new idea, and not very original thinking to have two presenters from 2051 A.D. in Star-Trek-type costume condescendingly discussing our blundering, wasteful century, though the attitude is justified. Fortunately the presentation of *Today and Tomorrow* is briskly professional, with talking heads kept to a minimum. Each programme considers a theme. Microprocessors and their applications came first. Programme two dealt with energy and the finite supply of fossil fuels. Transport, and the Global Village, complete the series.

Today's eleven year old and come to that, his twenty year old sister, are surprised to learn of the days when radios were sizeable pieces of furniture, and a hearing aid smaller than a loaf of bread was considered the latest thing in convenience. Now there are matchbox radios and calculators the size of credit cards; but the technology that makes both these and the robot car factory possible, is also the technology that should be giving nightmarish thoughts to those now employed in jobs which are likely to disappear as a result of these

developments. Even in agriculture, computers work out the quantities of water and fertiliser needed for automatic application.

The programme on energy possibly exaggerates the shortage of fossil fuels, but it is always salutary to imagine the chaos in a world which, geared to oil products, has to adapt to their absence. Just as Britain was first into the Industrial Revolution and seems to be the first to be on the way out, so too we may have to take the lead in designing a future without oil in its present form. The possibilities touched on here are startling in their scope, and in some cases, desperate.

Growing millions of acres of plants to convert them to fuel, alcohol, batteries of huge windmills, tidal barrages are put forward as possible measures to stave off a world in which the only wheeled transport would be cycles, prams and roller skates. (It has its attractions). The final programme in the series (which will be repeated next year) entitled *The Global Village*, which indicates its concern for the strain on the earth's resources by ever increasing demand, and the interdependence of everyone on the planet.

Children's attitudes towards this series, and others like it, are interesting. They are fascinated with the technology and gadgetry, bored by the talking heads, and apparently indifferent to the possibility that with the passing of only half a dozen years and the arrival of their legal right to acquire and drive a car, there may be no fuel to propel it.

Features with flair

Nick Thomas reviews 'Chalkface'

CONTINUING EDUCATION
Chalkface
ITV, weekends. Times vary between regions

The first programme in Granada's new education magazine series, *Chalkface*, was stiff and awkward - very understandable. By the fourth programme, though, the tone was still stiff and awkward, and the blame lies squarely on the professional television people involved, who have imposed upon non-professional broadcasters a whole armoury of creepy "communication techniques".

Because of this we have interviews consisting wholly of leading questions ("And teachers actually worked with experts from the Home Office on this, didn't they?"); constant chopping around between Ted Wragg and Stephen Cohen, presumably for fear of boredom if we see one face for two minutes; and the culminating awfulness of our two presenters sitting side by side trying to have an unaffected "conversation", like American newscasters.

A lot is demanded of the presenters in the way of spontaneity and what emerges is a sort

of mildly leftist, mildly beery (jokes about research into brewing techniques), heavily sexist atmosphere which represents quite well the more irritating backwaters of education.

An educational *Nationwide*? Well, *Chalkface* has one strong point: each week's big featured report is generally interesting, is given enough depth to mean something (unlike most of the snippets), and has the sense to let the participants be themselves.

There was an excellent film, for example, on the teaching of "television consciousness" in a Nottingham comprehensive, with access to the university studio to find out in practice just how television can put an "active construction" on apparently objective reality.

Perhaps the pupils should take *Chalkface* itself as a test case. In very many ways, the reality of its subject matter is being warped - not intentionally, but through the moronising telly-see technique of its presentation. Those responsible should recognise that, by the nature of the medium, they cannot compete with journals and newspapers for news and interviews. They should concentrate on the in-depth filmed reports, where they show a definite flair.



"Class", a new series of four programmes from BBC1 North, shows more than 30 examples of original dance work in schools. An A level certificate in Drama and Theatre Studies was introduced this year, and from 1983 an O level course incorporating contemporary dance will be available. The picture shows Miss Sharon Donaldson of Parklands High School, Leeds, in a dance called "Silent Scenes", which was part of the first programme. Programme two, shown tonight at 10.15 p.m. throughout the BBC North area, includes two improvised sketches, a dance solo, and a dance/drama work based on a poem by John Clare. The programme is introduced by Linden Almond, who teaches drama in Wakefield. The children whose work is shown during "Class" range in age from 12 to 19 years, and all of them live in Yorkshire or Derbyshire.

Glug, glug, glug

FILM
The Balancing Act
23 mins, colour, sound
Available on 16mm film, VHS, Philips 1600 and U-matic video cassette on free loan from Shell Film Library, 25 The Burroughs, London NW4 4AT. Teachers' notes with film.

Glug, glug, glug. Is it the oil flowing through the pipeline to satisfy consumer demand, or merely the healthy gush of Shell's cash-flow out of our pockets and into their banks? By treating the co-ordination of oil supply and demand as merely a question of logistics for Shell planners the makers of *The Balancing Act* beg all the really interesting questions.

Perhaps this would not matter so much if those logistics were more palatably conveyed. However, with a female commentator whose voice is as scratchy as a knife scraping a plate, a grossly over-simplified pictorial representation of the route from well-head to consumer, and a deal of

whimsy in the script, it can hardly be said that this film does the PR job which one imagines it sets out to do. Nor, as Shell-Mex's director of film Mr Godfrey Jenkinson pointed out to me, does the film have any particular educational point.

"We just make the films to explain our point of view to the general public," he explained. "It just so happens that 70% of our borrowings from the film library are schools." A level economics was suggested by another employer as the correct educational slot for *The Balancing Act*.

In order to get across the really very simple notion that big companies need to employ short, long and mid-term planners, whose work is correspondingly hectic, measured, and contemplative, the figures Short-Term (fat, sweaty, always on the phone), Medium-Term (city suit, reading newspapers) and Long-Term (armchair, pipe, and a book) are used.

It is vital for everyone, a level economics student no less, to be aware of how the oil companies supply and public demand intermesh. But watching *The Balancing Act* is not going to help anyone to find out

up these explanations with recourse to the film is a fairly useful explanation to animated diagrams. Stripped of these trimmings, this middle section of the workings of one section of an oil company. It does not, of course, explain the strategies of marketing, politics, the business competition - which underlies these tactics - and which a level economics student should be able to begin at least to comprehend.

The first and last sections of the film are totally redundant. The first - a poetic sequence of an acrobat on the beam - merely illustrates the

idea of balance. The last, several minutes are occupied with a baffling series of jargon-filled dramatic encounters between various members of the "real life" 400 planners whom the fictional planners represented.

There are two responses which could be made to the education and training

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equipment only as good as the teaching material

In an attempt to identify the directions of change, the pattern of organization is important not least because in the decentralized British system it is the organization that is always being reviewed, perhaps because those theoretically in positions of authority actually go on. I suppose the first pattern of organization was "hunting with Father", still extant in training where it is known as "sitting next to Nellie". It is the family-based learning model.

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Enthusiasms

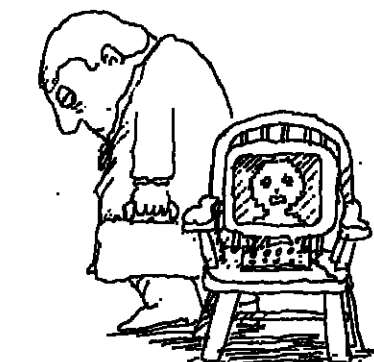
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a new one. The first requirement is for an accurate definition of the perceived need. That is to say, we should accept that the prospective student knows in broad terms what is needed, but help is called for in making the requirement more precise.

The next stage is to draw up a study plan, which could call on elements from existing conventional courses, elements from existing open learning systems, and self study elements put together for this specific purpose. The student then needs access to the learning materials, access to tutorial guidance, and access in appropriate cases to practical facilities and to opportunities to meet with fellow students. There is also the need to test at suitable points in the process whether progress is being made towards the desired goal – not necessarily the same as continuous or intermittent assessment for the purpose of awarding qualifications.

All of these functions could be provided in the conventional way: at institutions, at set times. But technology offers an alternative. There are interesting questions to be explored in respect, for example, of how much of the counselling function could be done through a videotex system. Certainly the information-providing part, but how far could one go with the guidance element? It is not too far from the best way of using the various delivery systems to bring the learning material to the student, and the range of such systems is continually extending.

At this point I seem to hear an echo of a protest from the time of the early teaching machines. How about the teachers? The classic riposte – that any teachers who can be replaced by a machine should be – still stands. But I would like to go a little further, on a broader front. In industry, in the office, and in education and training, the replacement of human beings seems to point inevitably to the taking-



teacher replaced by machine

over of certain tasks by the machines. But in the caring services, and in all those parts of our society where people help people, there are no limits to growth.

The education and training process must surely always contain a very large element of this nature, whether in the form of counselling and guidance services, of group and individual tutoring or of that most interesting part of the process – helping students to explore their understanding. However, it is important, if you are in the business of people helping people, it is necessary to make sure that the help is what the recipient wants to receive, not what the giver wants to give.

Technological developments offer us the opportunity to extend the range and scope of the education and training system. I would like to see that potential used to the full in the interests of the learner. I am convinced that if we do that, there will be no lack of demand for the services of those whose purpose in life is to help others to learn.

Benjamin: The Sabre-toothed curriculum. Chapter 1: 1 from The Curriculum: Context, Design & Development, ed. R. Hooper (Open University Press, 1971)

W. Birch and R. E. Cuthbert: Costing Open Learning in Further Education (CET, 1981)

Geoffrey Hubbard is Director of the Council for Educational Technology.

Aspects of educational technology

Patterns of Teaching by D. Mantz Yorke. Published by the Council for Educational Technology. ISBN 0 86184 030 5. 28.

Patterns of Teaching is subtitled "a source book for teachers in further education" and is intended to extend and develop the ideas contained in the workshop materials and self-study units of the "Designs for Teaching Project".

The book deals with findings not

only in new and recent teaching methods, but also with aspects of educational technology and how it can be practically incorporated into existing arrangements.

The section on "Audio-visual media in laboratory work", for example, suggests that the use of media can help to overcome the problem of students entering tertiary education with limited laboratory experience and that often, students' attainment of objective is improved when audiotape with pictures or videotape has been used.

Basil Browne

Dialogue for a new VIC

Wendy Roy discusses the potential of the Video Interface with Computer system

The VIC (Video interface with Computer) system is a unique permutation of the technology currently being explored by certain sectors of American education, but it has not yet emerged within Britain because the videodisc players themselves have not yet been launched here by the manufacturers. The first launch date is scheduled for autumn this year. This will be the Philips LaserVision consumer model.

In the US VIC systems have been developing since the late 1970s and many are now well into the first generation of software programme production. Both computer programs and video programmes are used in the VIC system so it is wise to make the distinction from the beginning.

The typical VIC system uses a standard monitor and computer and ancillary equipment. The major technological innovation is the video disc player. There are two types of player: the optical and capacitive. The more technically sophisticated optical players are of most significance at the moment since capacitive players with computer interface capability have yet to be developed to a marketable level.

The optical videodisc player uses a laser beam and a videodisc which revolves at 1800 revolutions per minute. There are 54,000 tracks per disc, each having analogue pits containing the signals needed for one video screen frame. The US models use 525 lines of signal per frame, while the British system will use 625, relating respectively to existing TV standards.

The US disc spins at the equivalent of 30 frames per second, resulting in 30 mins playing time per disc; there is also an extended play version which runs for 60 mins but loses its frame access capabilities. The 30 frames per second speed ensures that the sound, laid down in the second audio track of the disc is not garbled, which it would be with the existing technology at any other speed.

The videodisc as discussed here is produced in two ways: the optical transmissive and optical reflective. Optical reflective discs are covered with a reflective coating causing the laser beam to bounce off the surface of the disc to photocells above. Optically transmissive discs are transparent, allowing the laser beam to shine through the disc to the photocells under the disc itself. Of the US videodisc players, the Thomson-CSF TV model is optically transmissive while the Philips VLP Magnavox MCA Discvision and Pioneer models are reflective. It is a model of the Philips VLP system which some British enthusiasts consider will be the most successful in this country.

The Nebraska University Videodisc Group has identified four different video player performance levels: 1

Basic Player – any consumer model, either videodisc or tape, designed for real-time programme play. Level 1 – a consumer model videodisc player with freeze-frame, autopost, chapter search and dual audio, but with limited random access, limited memory and no processing power. Level 2 – an educational/industrial model videodisc player with all the capabilities of a level 1 player, plus a built-in programmable memory. Level 3 – the same educational/industrial model player interfaced with a computer. It is level III which we are calling, in this article, the VIC system.

Any disc designed for a VIC system can operate on the lower levels of player. The interface with computers, however, gives the ability to obtain more than the "read-only" memory printed into the disc itself, since the interface permits an overlay of dynamic computer graphics on videodisc still frames or motion sequences.

While an optical reflective disc player cannot use a transmissive disc, any optical reflective disc player can use any optical reflective software whether it was designed for that level of use or not. This gives complete compatibility between the optical reflective software and hardware, within the limits of the functions each player can provide. The same is true for the transmissive components and software.

The two optical systems are identical, however, at premastering stage, i.e. the different transmissive or reflective masters for pressing multiple discs can be produced from the same premastering material – a 16mm film of 1" (normally) videotape. This means that designers of software programmes can produce programmes for both optical systems simultaneously.

In the distribution of software this interchangeability is important as it enables production costs to be kept as low as possible. Production of a videodisc is very expensive at the development stages – especially those designed for VIC systems where the computer program is laid into the second audio-channel prior to mastering. If there are any faults in the computer program they will be printed into every disc produced by the master. It is essential therefore that production of both the computer information and the visual material be tried and tested adequately prior to mastering – an expensive process.

When the mastering is done however, videodiscs are very cheap to press, especially with high runs. Costs vary from £4-£10 depending on the system and disc features – far cheaper than videotape duplication.

And, since the VIC system could use computers already installed in schools, and the standard television set already placed in classrooms, the purchase of

videodisc players are all that is needed. Once a British system, whichever one it will be, is established, there will be little, barring funds to buy or rent a player and permanent, indestructible discs, to stop those more innovative teachers exploiting VIC systems in education, providing there is an adequate supply of suitable software.

Who holds this key to the development of software for the British system? In the education field, development of CAL materials could be the obvious candidates to develop and produce such material. Yet it is not necessarily the lack of a British system which will hold back the development of British software, nor even the lack of funds, it will probably be lack of insight into the potential uses of this system within the classroom, and lack of expertise in the development of integrated visual-audio-computer software.

While teachers and developers of CAL software and distance learning materials at the International Video Conference in London recently were excited by the presentation of the American VIC systems, the media people seemed unaware of its tremendous potential. Without the combination of teachers and media producers any software produced for the British market is bound either to be boringly didactic, thereby denying the exciting learning possibilities of this new combination system, or too loose and media orientated to be of educational value.

As yet there are no plans to fund development of VIC software, though it is rumoured that the whole question of videodisc technology is being discussed at Government level. It could be that, without funding for British VIC software development, either from the Government or from broadcasting industries, or from software manufacturers themselves, UK software will merely filter through into the British schools without modification.

However, because of the strong emphasis on formative evaluation prior to mastering, the software so far developed could be regarded as very deterministic both in content and learning theory. It is often specific to American educational needs. It is also debatable whether the learning theories used by the Artificial Intelligence school upon which much of the software is based, have relevance to British educational methods.

At a guess, it will take several years for the VIC system to be fully introduced into Britain. It will take as long for some of the more fundamental questions concerning its use as an audio visual technique and the types of software most acceptable to British teachers and pupils to be solved. It is essential that action is taken very soon.

Contact your local Apple dealer today!

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extra

Preview

National Education and Training Exhibition, July 2-4, National Exhibition Centre, Birmingham

BBC Enterprises, London
Videotapes showing BBC titles can be viewed on this stand, including a compilation of extracts from many subject areas. The concentration is on technological titles such as *Technical Studies*, *Managing the Micro*, and *The Superheroes*. General titles include a compilation of Shakespeare plays; *An Everyday Miracle*, the story of a birth; and material on mental handicap and on smoking.

F. W. O. Bauch, Boreham Wood, Herts.

F. W. O. Bauch Limited, the sole U.K. agents for ReVox, are showing the latest educational and training aids from ReVox. These include the ReVox Training Processor, a microprocessor-controlled training system designed for use with the AudioCassette System and D88 cassette deck; the ReVox D88 cassette recorder with new accessories; a carrying case (classroom unit), infra-red remote control and the ReVox 884 Language Laboratory with the new R88 reel to reel Master Machine, and new software developments.

British Transport Hotels, London
Information on meeting and conference rooms will be on display including details of the group's "room service package".

Central Film Library, London
New films and videocassettes on display include many on management training, equal opportunities, health and safety at work, energy management, and nursing training. Some of these are on free loan, and some are available free. The catalogue of free Central Film Library films and videocassettes is itself free.

Christian Audio Vision Services, Enfield, Middlesex
This company sells audio and high speed duplicating equipment. They specialise in high speed cassette copying, in the installation of PA systems and audio equipment, in professional recording equipment and projectors.

Comfort Hotels International, London
Information about training course facilities and special packages and rates are available here.

Coomber Electronic Equipment, Worcester.
This company has several new products on show, among them a digital timer for their radio cassette tape recorder, and an additional timer module, an external unit for use with any equipment.

CST Training Service, Bushey, Herts.
The emphasis here is on films on communications, safety and training in industry and commerce.

CZ Scientific Instruments, Boreham Wood, Herts.

The Elmo overhead projector and the Gaf Inmatronic dissolve system, both recently introduced into this firm's range, are on show alongside the S300 filmstrip and slide projector and the 16 CL 16mm film projector.

Distributive Industry Training Board, Manchester

Three new training programmes in a video format are among the items on show. The programmes cover selling, product liability, and training for buyers. The Board makes programmes for the distributive industries, for management training, and for individual companies. The show reel on the stand includes excerpts from many types of programme.

E & L Instruments (UK), Wrexham, Clwyd

The range of this company stretches from Basic Electronics through to Digital Electronics and microprocessor technology. They are showing their logic designer, and fibre optics experimental equipment. E & L equipment is supported by the TechniBook series (formerly Bugbooks).

Education Equipment, Bann Publications, Tonbridge, Kent

Education Equipment is a buyers' guide with a controlled circulation. It is distributed to people who can influence or authorise buying among education authorities and educational establishments. Otherwise, it is available by subscription. The journal has two supplements, *University Equipment* and *Sports and Recreation Equipment*. Primary and Middle School Equipment is a separate, controlled circulation buying guide.

Educational Foundation for Visual Aids, London

The National Audio Visual Aids Centre has been established for more than 30 years and has branches throughout

Great Britain. It provides an audio-visual service that covers equipment and software sales, film and equipment hire, and training. The training department runs regular courses for audio-visual techniques. Regional offices provide equipment sales and servicing.

The Electricity Council, London
The Understanding Electricity service to schools is a package produced jointly by the Electricity Council and the Generating Boards of Great Britain, Ireland, and the Channel Isles. It consists of films, publications, information for home economics and science, and details of nature trails across power station land.

Engineering Careers Information Service

Engineering Industry Training Board, Watford, Hertfordshire
All the information leaflets and books published by the careers service are on display, alongside all the craft instruction manuals produced by the training board.

ESL Bristol, Bristol

This company are showing their products for use in the production of tailor-made multi-media training programmes. There is also a range of prepared material.

Exeter Tapes, University of Exeter
Exeter Tapes offer a broadly-based series of audio recordings for all those interested in modern languages, literature and civilisation, for use in the classroom, as home study materials or as pleasurable listening.

Feedback Instruments, Crowborough, Sussex

The entire range of Feedback Industries' products is on show. The new MICA series of application modules



From "Medieval London", a video cassette from the Central Film Library

and interfaces is of prime interest. Interfaces are available for the Pet M65, Apple 2 and ABC80 computers.

The Antenna Systems Demonstrator ASD 512 provides a practical, non-mathematical understanding of how antennas work. The company is also exhibiting a range of equipment for basic electricity and electronics; telecommunications; electric power and machines; control and instrumentation; digital systems and computing; industrial and vocational training.

Festo Pneumatic, Crowborough, Sussex

This company, a division of a much larger group, markets text books, films, and audio-visual materials for the automation industry. Their main subject areas are pneumatic, hydraulic, electronic and mechanical engineering. Seminars and training for engineers is also provided. Two film shows help to explain the work of the company.

Gateway Audio-Visual and Opteway Video, London

These companies produce tailor-made training and sales films for companies. They are giving information about their service, and showing films.

G. P. Systems Co, Coventry

Equipment for use in teaching office skills is the speciality of this company, and among their products are the Teletext system for teaching telephone technique, the GP Multichannel shorthand and audio typing system, and the Strifordian shorthand and audio typing desk.

Grubb Parsons, Newcastle upon Tyne

Perseus, the Makarov 'Cassegrain' telescope, is being launched at the exhibition. The company say that this 225mm instrument is robust enough for teaching applications at schools and universities.

Grubb Parsons specialise in the



The Atari 800 personal computer system has 16K bytes of RAM

design and manufacture of precision mechanisms ranging from instruments for large observatories to the 125mm Newtonian telescope, Andromeda, which is on show with Perseus.

The display also includes a range of optics and a photographic display of starfields and nebulae produced by Grubb Parsons instruments.

Guild Sound and Vision, Peterborough
Two divisions of this company are showing material: Guild Learning and Guild Training. The principle new product is the "Basic" video computer package, which aims to teach the early stages of computer programming in the computer language of the same name.

Haddon Hall Conference Hotel, Buxton

Brochures and information on conference and meeting facilities are on show.

T Harrison & Sons, Heckmondwike, West Yorkshire
Harrison are showing their T300 centre lathe, which was especially designed for education and was launched in March. The M300 is also on the stand. This lathe is more suitable for use in training colleges. Both machines are being demonstrated. The Harrison wood turning lathe and grinding machine are on display.

Hotel and Catering Industry Training Board, Wembley, Middx.
Training aids and information on courses are shown here, together with careers information.

Housecraft Magazine, London

Housecraft is the official journal of the Association of Teachers of Domestic Science, so most of its readers are drawn from the field of education. It is intended for lecturers and for teachers of home economics in secondary schools.

Among the other ATDS publications on this stand is *Nutrition in Action*, which contains suggestions for methods of teaching nutrition using ideas suggested by teachers in first, middle and secondary school.

ICETT, London

ICETT is one of the sponsors of the National Education and Training Exhibition, so its stand is at the service of all the exhibitors. A trade association, its first obligation is to industry and to the companies it represents. Information on the work of ICETT and on all the exhibitors is available.

ICFC Consultants, Windsor

The ICFC Consultants stand concentrates on two main aspects of its training and educational activities—the new Work and Learn scheme for unemployed school leavers and the Understanding Industry lecture course for sixth formers.

Ingersoll Electronics, London

The principle exhibits on this stand are the company's Atari 400 and Atari 800 personal computers. Software for both computers is also on show.

Institute of Training and Development, Beaconsfield, Bucks.

One of the trade associations sponsoring the exhibition, the Institute is the only professional body that represents trainers nationally, and it has 33 branches in the United Kingdom. It provides qualifications for training and development which include a diploma of training management. Regular

meetings and the specialist journal help to keep members in touch.

Jessups, Leicester
Jessups claim to be the World's largest photographic store, with 25,000 square feet of showroom space and 15,000 items of audio visual and video equipment on sale. The current range includes JVC and VHS video equipment, as well as Bell & Howell av items.

JMC Compak, John Garbett Audio Visual, Wokingham, Berks

These two companies offer audio visual systems for specialised applications. Compak offer multi-media rear projection systems for conferences and meeting rooms. A wide range of standard projectors can be built in to use a common screen.

John Garbett adapt popular vehicles to make mobile av units which can be used for indoor or outdoor presentations. Another product on this stand is the telephone training aid which can be used with up to 12 students.

Job Training International, Norwich
A new training publication called *Job Training International* is on display here. The first issue came out last month.

Kepac, Altrincham, Cheshire
Kepac, manufacturers of training equipment and educational toys, are showing a new display kit for school use on their stand.

The K100 can be used for displaying pupil's work and projects, or as partitioning or scenery flats for dramatic productions.

Link Cable, Macclesfield
On display is screen printing equipment, an exposure cabinet, a steamer, screen printing table and screens.

L.J. Electronics, Norwich

This company specialises in microelectronic and microprocessor equipment for education. The Emma micro-computer and peripheral hardware are the principal items on display, alongside the Switched Faults Unit, and the Logic Analyser, which is used to design and test micros. The Visa expansion unit is also on show.

Machine Assisted Programmes, Winchester

This company is exhibiting a training programme for adult illiterates. Made up of tapes and cards it is designed to allow pupils to work on their own. Also on show is audio-visual ABC to help pre-school children learn the sounds of the alphabet.

Magiboards, Mitcham, Surrey

The speciality of this company is white boards, and the full range of boards and accessories such as marker pens is on show. Perpetual Year Planners, mobile stands, flip-charts, graph boards, chalk boards and pin boards are also shown. The Magiboard Teaching Kit includes magnetic notes, bar signs and so on.

Management Games, Amptill, Bedford

The full range of packaged training materials, games, and simulations, is shown on this stand.

Mathpower Services Commission, London

MSC programmes for helping industry through business, office and management training are displayed on panels and the booklet "A New Training Initiative" is available.

Continued on next page

Preview continued

Markerboard Supplies, Hereford
Boards and magnetic accessories and pens are on display.

Martello Sound, Rye, East Sussex

A range of communication systems, including radio microphone equipment, is being shown by Martello Sound. The newest item in the range is a system which incorporates pocket transmitters and receivers with single or multi-channel base stations.

McGraw Hill Books, Maidenhead

On show there are 46 books on subjects including education, psychology, general studies and mathematics.

Microcass Computers, Hemel Hempstead

The theme of this display is "Apple and the Curriculum", and the main display is the section on word processing, which shows children what they can do. Microcass is a videotape show-tries is built of Basic, and sections are devoted to schools administration and word processing; arts, languages including technical design, modern languages and music; physics, maths, and a Preatal link.

Midland Group Training Services, Coventry

The Midland Group Training Scheme has about 150 member companies, mostly in engineering but also in retail and catering industries. They run a training officer service, and group training schemes for smaller companies who do not have their own training departments. For larger companies, training consultants are available. All services and activities are explained on this stand.

Mids Video Systems, Nottingham

Mids Video Systems Limited are exhibiting their portable mini colour video which is designed to take up to two colour cameras and 4-channel video. Also on show is their range of best colour and monochrome receiver monitors.

Micrographics, Weston-super-Mare, Avon

Lettering, Letteron signmaking machines, Goodhue gullottines and photo-mount equipment are shown on this stand. Micrographics lettering equipment is said to produce instant, permanent lettering.



"Trade and transport", Central Film Library

Adhesive wording correctly spaced and aligned at up to five times the speed of rub down sheet lettering. The system can be used both in and out of doors and is suitable for overhead transparencies, printing and writing, charts and boards.

National Association of Teachers in Further and Higher Education (NAFHE), London

NAFHE is exhibiting a range of materials and basic education. Known on this stand, NAFHE are contributing on a description of the service, on new opportunities for young trainees, and on provision for the young unemployed.

Basic education such as literacy and numeracy, more traditional FE courses such as foundry work, opportunities for full and part-time study at various levels during a working life, and adaptation to new technologies, are among the topics which are also shown.

Northumbria, Eastbourne, East Sussex

Whiteboards, overhead projectors, overheads, magnetic markers, easels and pads, new materials, this stand includes performance boards, a dry-whiteboard, and a black leatherette board.

Norfolk Capital Hotels, London
Of the thirteen hotels in the group, most are able to cater for the needs of companies and training organizations who are organizing residential training courses. Information on rates and facilities is shown on the stand.

Paka Products International, Manchester

Sports equipment and clothing is marketed by Paka Products, and items such as footballs, basketballs and tape measures are displayed as well as training bibs and track suits.

Paper and Paper Products Training Board, Potters Bar, Herts

The main emphasis is on training aids including tape/slide presentations on educational/careers topics. The titles are *Paper* and *Make it with Paper*.

Parsonage Electronics, Ashford, Kent
Parsonage Electronics are especially proud of their new electric piano/organ for children. It weighs only 12 lb. They are also showing a console unit for group piano teaching, quiz counters, and a feedback electronic classroom of a kind used for training by both the BBC and the army.

Pel Ltd, Warley, West Midlands

Pel specialize in furniture for schools and colleges. Their range of desks, shelving, and library furniture is being shown.

Price and Bucklands, Nottingham

Plain and embroidered sweaters for schools and clubs are on show here.

PTS Electronics, Derby

Video and audio material is shown on this stand. It includes audio visual aids, closed circuit television, projectors, tape recorders, and accessories such as acetate rolls, blank cassettes, and pencils. The aids are intended primarily for audio visual training.

The Publishers' Association, London
The Association will be displaying books from several member publishing firms.

Quadrant Educational Drawing Equipment, Birmingham

Quadrant Educational Drawing Equipment Ltd, are showing a range of technical drawing equipment for use from middle school to university level.

Radio Rental Contracts, Feltham, Middx.

This company is showing videocassette recorders, a new television receiver for schools, and Viewdata products.

Ramsell-Naber, Birmingham

This company is showing a range of furnaces and kilns. New is a low energy kiln for ceramic firing with a standard microprocessor controller, and a box furnace for metal working, also with microprocessor controller. The company gives a 7½ per cent discount to educational establishments.

Remploy, London

A new range of laboratory furniture with modular cupboards and drawers and work-top finishes is on display.

Road Transport Industry Training Board, Wembley

Following research undertaken with Loughborough University the board is producing products to help in flexi-training. These include learning packs, listen and learn programmes (a tape and workbook), question and answer cards and booklets. Subjects include health and safety, marketing, administration, craft-operative training, legislation and finance.

Rotatrim, Uxbridge

On show here is this company's range of hand-operated cutters for use in offices and classrooms, including new motorized versions which could be useful for handicapped children.

Sabitron, Preston

Some new students' furniture for use with the Digital language laboratory is on show together with a modified teaching control console.

See and Learn, Gloucester

See and Learn are exhibiting reading aids for the handicapped and normal children and a machine designed to help in the teaching of Braille.



Coomber stereo record player 545

Service Training, Kenilworth, Warwickshire

This company makes filmstrips slide/tape and video programmes to the specification of individual clients. They say that their experience in the area of training has enabled them to develop a complete package comprising translations, literature, and quizzes.

Shell (UK) Ltd

On show are wallcharts and booklets of interest to teachers.

Snowball Sports, Nottingham

A large range of sports clothing is on display on this stand. The company which is the biggest supplier of printed sports wear to universities, are emphasizing printed clothing.

Specialist Audio Visual, London

A new range of 16mm projectors from a company called Hokushin, including a Roller-loading projector, is on display. Also on show is a new range of projector stands from Brestford Manufacturing including a complete resources centre storage cabinet, and the Kierdman and Malinverno ranges of school projectors.

Swan-Stabillo, London
On show here is this company's overhead projector transparency design manual which assists people in drawing their own transparencies. Pens, markers and accessories for the production of chip transparencies are also on display.

Teacherboards, Bury-in-Wharfedale
On display is a range of roller chalk boards, ordinary chalk boards and white boards, and portable and mobile boards.

Teaching Wall Systems, Preston, Lancs.

On display is a range of furnishings. These range from a single wall board to a comprehensive unit to house a wide variety of audio-visual equipment.

Technician Education Council, London

The Council aims to develop and operate a unified technical education policy, and provides certificates and diplomas in engineering, life sciences, building and construction, art and design. Careers literature and information on continuing education are available on the stand.

Teemedia, Loughborough

This designer and developer of training products has a number of multi-media packages on display.

Tequipment Ltd, Nottingham

This company is showing laboratory equipment, including control engineering and systems equipment, automotive engineering apparatus, telecommunication equipment, electrical engineering and material testing apparatus.

Training Films International, Wiltshire

This company has information on its wide selection of training films. Subjects include business management, safety and sales.

The Training Officer, Manchester
This journal was the first specializing in industrial training to be published in the United Kingdom. It covers new training methods and theories as well as packages, products, books and events.

Training Technologies Division, Slough
College of Higher Education
Training materials and information on courses are on show.

UK Atomic Energy Authority, London

This research arm of the nuclear industry is showing a new mobile exhibition on nuclear energy and a prototype of a teaching resource pack on the same subject.

Unicoll Engineering, Oxford

This company is showing items from its range of stands and trolleys.

VC Communications, London

A Swedish designed and manufactured presentation and display system is on show. Highly versatile, the company say, it can be used for training, advertising and marketing.

Video Arts, London

This company has information on their John Cleeve training films, which include a new film on individual training and a preview of *Foundations of Wealth*. This film was originally made for schools but has been remade for adults.

Visual Aids Centre (Secco), London

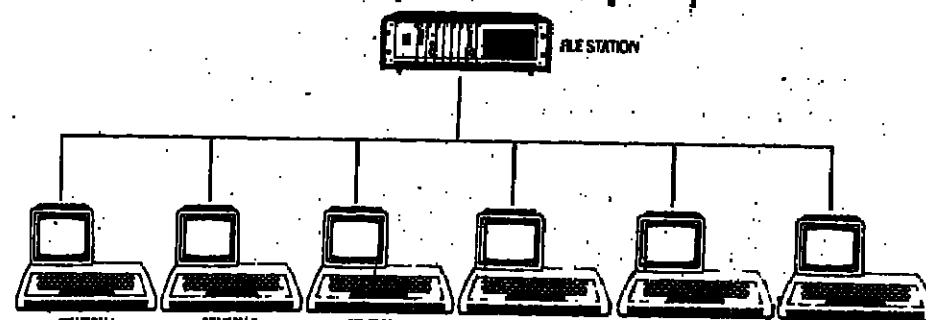
This company is showing overhead projectors and overhead projector software. On show are flipcharts, easels, screens, episcope, flockpaper and photostats. Bell and Howell audio-visual products are displayed.

WCB Containers, Kidsluff Division, Manchester

On show is a range of children's play equipment for children from pre-school age to 12 years.

THE ACORN ECONET

The new low-cost interconnecting communication system for computers and peripherals.



"To our knowledge the Econet is by far the lowest cost network available in the world."

A ten station network with 400K byte file station costs around £3,000 and then as little as £50 for each additional station interface.

WHAT THE ECONET DOES
The Econet communications network system has been developed to enable up to 255 Acorn and/or other systems to communicate with each other almost instantaneously and to share facilities such as disks and printers. The network is totally democratic. All stations can communicate with each other independently unless specifically prohibited. A data transfer rate of up to 210 Kbytes/sec. Any station can be set up as a master station with an ability to define priorities and open or close facilities to subordinate stations. The master station can however communicate with all stations at once or singly.

HOW THE ECONET WORKS
All the stations on the Econet network are connected together in the network by ordinary 4-core cable. There is no specific direction of flow of data; the network simply ensures a path between any pair of stations.

1. Before transmitting on the network a station listens until the network is free.

2. If two stations transmit simultaneously the "collision" is detected by a circuit on each station's Econet interface and both stations stop transmitting.

3. After a collision is detected, each station waiting the collision retries immediately or, if it is busy, the attempt and continues waiting until the network is free again. The course of action taken is determined by a "collision-arbitration" algorithm ensuring that no two stations go through the same sequence of actions.

4. In practice these procedures give very efficient use of the Econet, with the minimum number of retries.

During the time that two stations are in communications the network is kept continuously busy, so there is no opportunity for another station to interrupt and cause a collision. Once the communication is finished the network is released, and other stations waiting to send it will again compete to gain access to it.

ECONET'S ADVANTAGE OVER TIMESHARING
Each Acorn station costs less than a typical terminal on a timesharing system. Each station runs its own program at maximum processor speed; extra stations don't slow the system down. Each station is independent; a fault on one station doesn't affect the others. The Econet is far more reliable than a timesharing system. Extra facilities can be added as self-contained units.

ECONET WITH OTHER ACORN SYSTEMS
Any Acorn Econet System of standard Acorn can be added to Compact hardware modules to nearly double the Acorn.

ACORN carries the software for low level network commands. Specialised file server/prior server software is available.

At its lowest level the Econet can be linked to two Acorn only.

FIND OUT MORE!
For comprehensive information about Econet write to us in the coupon below and post it today. Full details will be sent to you straightaway.

ACORN COMPUTER
Acorn Computers Limited, 4a Market Hill, CAMBRIDGE CB2 3UJ
Please send me full information about the ACORN Econet.

Name _____
Establishment _____
Address _____
Postcode _____
Telephone No. _____

extra Subsidised microcomputers, a guide for purchasers

A. K. Hennessy looks at government recommended computers

The recent announcement of a 50% subsidy from the Department of Industry towards the purchase of the Acorn Atom or the Research Machine 380Z by schools has led to considerable controversy and dismay from educational users of microcomputers, as well as the manufacturers and dealers. For those in the computing industry who are involved in the evaluation and use of microcomputers, the announcement is baffling. There is no justification for foisting on schools computers or any other equipment that does not meet their requirements merely to provide a captive market for British manufacturers.

Minimum requirements

What kind of computing facilities are needed by schools? From our work in schools in the Manchester area, we have found that the following are minimum requirements for schools computing facilities:

- a full alpha-numeric keyboard capable of withstanding considerable "bashing";

- A BASIC compiler/interpreter with string, file and decimal handling using standard variables (Microsoft standard or similar);

- memory to hold at least 200 lines of program instructions; usually at least 4000 characters (4K bytes of RAM) in addition to the memory taken up by BASIC and other software such as the operating system, monitor or editor;

- ability to record programs and data on magnetic tape or disks;

- upward expandability with regard to memory size, and additional facilities such as an operating system for disks;

- linkage to a printer (not a promised printer not yet in production, but a printer that is seen working NOW);

- without a separate interface unit;

- linkage to a video display, usually a TV set;

- as few connectors and leads as possible.

The ideal schools computer would have a floppy-disk unit, video screen, printer and keyboard all in one unit that weighed less than 25 pounds so that it could be carried into the classroom, plugged in and switched on, all ready for class use.

In addition to the specific features of the equipment, we found that schools need the following:

- local dealer support for maintenance, routine technical queries and repairs;

- a library of at least 100 programs suitable for educational use;
- an advisory service available from nine to five on weekdays to deal with questions that local dealers cannot handle; or specialised educational queries;
- manuals covering the workings of the equipment and the software with sufficient detail and clarity for the new user.

With these requirements in mind, how do the subsidised machines measure up?

The Acorn Atom (not the BBC model) is a small hobbyist's kit in assembled form. It has a full alpha-numeric keyboard but the mechanical operation of the keys is unlikely to stand up to schools use. For this reason, the BBC version of the Atom will have an improved keyboard. Its BASIC has only the minimum facilities needed, and would not normally be suitable beyond the first five to ten computing lessons. In addition, the version of BASIC supplied by Acorn is non-standard, which means that any programs written for other machines would be very difficult to convert to run on the Acorn.

The simplest Atom

The "starter" version of the Atom has only 512 bytes for programs to cope with schools requirements, additional memory would have to be added at extra cost. The Atom has a link to a magnetic tape unit; although a disk unit controller is available with disk unit, there is at present no disk operating system (without which the disk unit is virtually useless to schools). Communication facilities can link the Atom to other machines.

The Atom can be expanded to a maximum of only 11K bytes, rather than the 32K required. Linkage to a printer is available.

There is a video link on the Atom, but the video unit will have to be purchased separately at a cost of at least £60. If high-resolution graphics are used, the fully-expanded Atom will only have 5K bytes available for program instructions.

As far as dealer support is concerned, Acorn is extremely deficient. Their trade discounts are such that few dealers would find it viable economically to provide adequate technical services. The firm do not offer a software library or a users' service. The owner of an Atom will have to do his

own repairs and maintenance and find his own software. For the first-time user, this will mean a lot of wasted time and effort.

The user's manual, *Atomic Theory and Practice* is very well-written and easy to follow, probably the best-written of any of the micro manuals.

The cost of buying the Acorn Atom should be viewed in terms of the changing situation. The current version is likely to be superseded (making it obsolete) by the BBC version and an up market version, both of which will have different BASIC compilers and will be incompatible with the current model. The price of £174.50, with no Government subsidy, plus the cost of a video unit at £60, a printer at £300 minimum and memory expansion at £50, makes a total of £584.50.

The video unit and the printer could possibly be used on the newer versions of the Atom, but the rest of the equipment would be phased out within the next one or two years for lack of service and replacement parts. For schools that wait for the BBC version, the first price will be £260 instead of £174.50 for the basic unit; the subsidy would be £130, and the total cost would be £520.

In summary, the currently available Acorn Atom is basically an assembled hobbyist's kit; in a number of vital features it is not suitable for schools use. When the BBC version is in production later in the year, a further evaluation of the position can be made, but for the present a school would be unwise to invest in this equipment.

Robust, practical keyboard

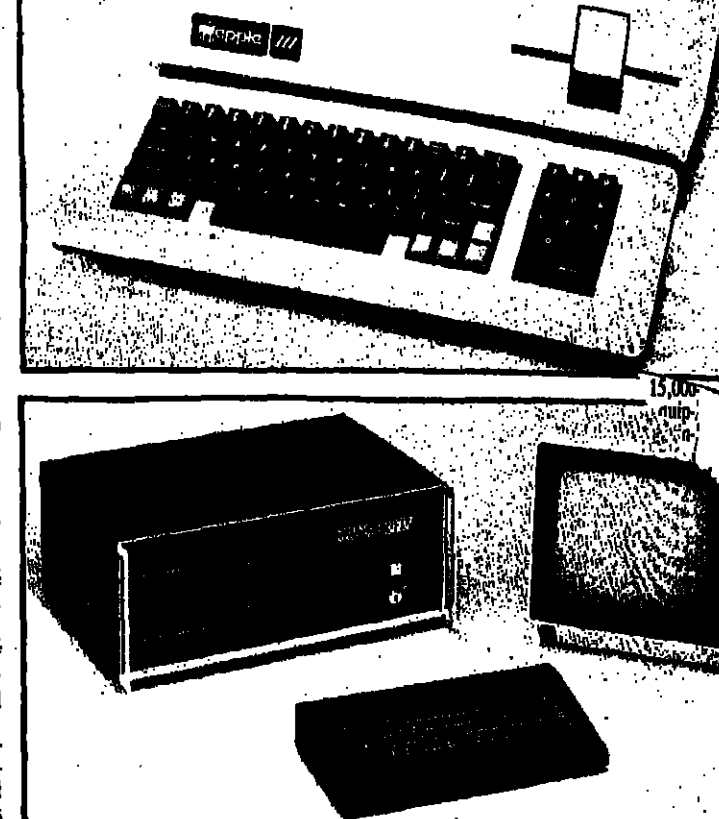
The Research Machine 380Z, at the other end of the micro market, is much more of a practical possibility for schools use. It has a full, robust keyboard and complete BASIC facilities. Its file, string and arithmetic handling features were well ahead of the rest of the "micro" field two years ago. The "System 1" cassette-based machine has 8K bytes of available memory; it is expandable up to 36K bytes of working memory with disk unit link available and a first-rate disk operating system CPM (an internationally-accepted standard system). The 380Z is not easily portable, which makes it difficult for the first-time user, who is unlikely to have a computing classroom allocated.

There is a reasonable amount of 380Z software available, not from Research Machines, but from the various users such as MUSE (micro-computer users group) and the Inner London Education Authority who have standardised on the 380Z. The software tends to be passed around among schools rather than through a formal manufacturer-financed library as is the case with Commodore and Apple.

The 380Z equipment itself is quite robust. But dealers don't provide a repairs service and can't give technical assistance or servicing. The teacher is on his own unless his local education authority has established a technical support service (such as that provided by ILERA). As in the case of the Acorn Atom, the dealer network is thin - especially outside the London area - because the discounts offered are insufficient to warrant stocking the equipment and investing in technical support.

If something goes wrong, the teacher will probably have to shift the machine back to Research Machines and wait for it to be serviced. This is unsatisfactory in comparison with the service offered by most PET and Apple dealers, who come to the school and do minor "fixes" on site. PET dealers are required to have staff available to answer technical queries by telephone during office hours. In most areas, there is a choice among several PET dealers.

The lack of adequate technical support



Above, Research Machines' 380Z microcomputer, top, Apple III.

port is particularly frustrating for 380Z users because the manuals are not easy for the uninitiated to understand. This machine is definitely not for first-time users. A video unit at a minimum cost of £60, and a printer with interface are needed, at an additional cost of at least £400. This brings the total to £1500.

Looking at the position of the school's computer facilities in one year's time, most schools will find that one computer is not enough to meet the demand from teachers, pupils and administrators. At that point, the school will consider purchasing another computer, and this second one will not be subsidised. If the school buys a different model computer than the first one, the programs will not be compatible and it will not be possible to use the machines interchangeably. Thus at the outset, the cost of buying two or three computers within the next year has to be considered if a sensible decision is to be made.

The best value for money for first-time schools users is undoubtedly the Commodore range of PETs and the new VIC. These machines also have the benefit of a software library, user support, dealer service, and basic features. They have an internationally-accepted standard BASIC which means there is a variety of textbooks and magazines with material related directly to the PET's operations. The VIC also has fewer connections (only two mains plugs for the minimum configuration for schools, and two connectors) than any other basic machine, which means less can go wrong in the classroom.

The micro of the future will probably be the Apple III, with its built-in disk unit. It will incorporate voice input and graphics tablet among the plug-ins with the full range of the American Apple software library for education; even its price for two units is less than the subsidised 380Z. However, Apple still have to establish an adequate dealer and user support service in this country.

A reduced-price Sinclair ZX81 has been offered to schools with Sinclair's own "subsidy". This equipment is not a suitable choice for schools because there is still no printer link.

Value for money

To sum up the situation with regard to the subsidised microcomputers, we can give the following advice:

- the present Acorn Atom is not a

suitable choice for schools computing; when the BBC Atom is produced, further evaluation will be necessary before it is considered for schools use;

- the Research Machines 380Z is more expensive than the market leader, the Commodore PET, even with a subsidy, and it lacks the software library and user support that a first-time user will need;

- both Research Machines and Acorn lack the necessary dealer and user support infrastructure that is needed and is provided for first-time users by other firms;

- for first-time users, undoubtedly the best value for money even taking the Government subsidy into consideration, is the Commodore range of PETs and VICs;

- those schools that want to look five years into the future should keep their eyes on the Apple III.

The Government subsidy has only served to reduce the widening gap in price between British microcomputers and the rest of the market. There seems to be no appreciation of the problems created by the fact that schools must compete in the open market for equipment, supplies and software - when each £1000 spent by a firm is only £480 in "real" money because of the Corporation Tax loss.

A better approach might have been to allow any firm selling equipment to supply and software to a school to exclude the resulting revenue from its taxable income. This would provide a powerful incentive to the development of local dealer services for schools, which is the most urgent need. Adopting a "buy British" policy at this stage in the development of the technology and the microcomputer market is unwise from the point of view of schools, as well as detrimental to the long-term prospects of our own microcomputer industry.

The prices quoted were correct at the time of going to press but are liable to fluctuate, and do not reflect local dealers' discounts.

A. K. Hennessy works at the University of Manchester Institute of Science and Technology.

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extra Organization depends on facilities

David Kilpatrick looks at efficient storage systems for paperwork

Paperwork is too easily relegated to the traditional filing system known as a pile unless you're particularly well organised. Good organisation, in education as anywhere else, depends on having the right facilities. However good your intentions it is impossible to keep everything in its place if there is no place.

The cost of storage space is extremely high relative to the physical value of items stored, which often have a notional value only. Artwork, notes, masters for the duplicator, copies of useful articles for future reference, would be impossible to ovalue. The careers department faces a particularly serious storage problem in most schools, as the careers room is often chosen for compactness and the literature supplied by a few favoured industries is bulky.

Many people have already found that standard melamine faced clipboard shelving sheets will not bear the weight of solid paperwork unless supported every few inches. It makes very good sense to fit shelving systems with sub-thick pine shelves instead. The extra cost of the wood, and the work is sanding and sealing it, is justified in lower costs for wall supports and brackets.

Systems worth looking at if you heed shelving must be very strong, and safe enough to bear the weight of a climbing teenager. Industrial steel shelving systems can have sharp edges underneath. At around £10-15 per four foot run of five or six shelves six feet high in total, and deep enough to take a standard A4 ring binder or box file, costs from cut-price retailers are often competitive with direct supplies. Rightly problems are solved by bolting the frame back to the wall top and centre.

Click Systems of Kirkby-in-Ashfield, Notts, manufacture various types of shelving and display systems which are also marketed by Habitat (the self system can incorporate wiring for lights, but is comparatively expensive). Dexion is available nationally, but its main advantage lies in strength. The best applications for Dexion are for suspension of temporary stages in halls, and similar structures.

Speedframe is less well known by name, but enables anyone with a ladder and a measure to manufacture rigid shelf, desk and other designs. Speedframe's cheapest variation is one inch square metal tube, coated black, with push fit joints, angles and Ts. To make shelf and worktop fixing easier, they slot Speedframe so that no drilling is necessary. Only the concealed, surface-bearing struts need be made of this type.

One of the best low-cost storage systems consists of a pallet of common housebricks and some planned 12 x 1 inch timber. The bricks can be stacked dry or mortared to form the support pillars for the timber shelves. This is ideal for book storage. Do not

built higher than waist level with this method, and make sure the result is solid, balanced and stable.

Permanent storage of paper is cheapest in shoe boxes, but a better solution is available from Banker's Box. The R-Kive boxes take up to footcap length sheets and are a full 12 inches thick; the neater Systematic Transfer files resemble a 4 inch thick box file but are much cheaper. The Folder-Mate boxes stand on a desktop and hold a similar thickness of papers with good top access. There are three Banker's Box filing drawer systems, which take conventional suspensions, files and come as single drawers which stack to any height.

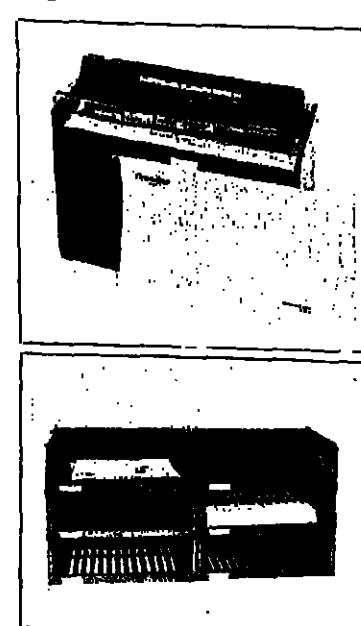
All these items are made of a strong kind of corrugated cardboard with a thick outer skin and printed finish. The filing drawers are the most surprising in terms of performance for cost; a complete drawer is around £6.50, compared with conventional filing cabinet costs of roughly £20 per drawer. Lighter weight storage boxes are made by companies Dentax, who are Danish, but Banker's Box are British made, and the range is vast. The boxes are usually classed as stationery, but overlap into being items of furniture. Deep storage of this make costs around £18 per cubic metre.

Another company worth looking at is Esselte Dymo. Their Sortu A4 plastic trays are fairly expensive per unit, but unlike beamstalk filing trays they do not need extension levers between each tray - they simply stack up, and also fit side by side without loss space. They can be used free standing on a desk, or fitted into a cabinet which takes 48, or put on trolleys.

The Myers system tray works in a similar way, and if you have wall space but little desktop space, the Blaise range of steel letter racks reduces the cost per shelf to between £1.50 and £3 depending on the number of shelves on the unit bought. Such systems have the disadvantage of lacking flexibility and having a fixed, limited space between the shelves. I find an eight-shelf version ideal for sorting out current work and gradually progressing from bottom to top, but neglected items have a habit of creeping to the back of the slightly tilted shelves and getting lost.

Metal or plastic filing trays are still about three to five times the price of sturdy board systems. You can obtain ten 5 inch thick Guidex Storflat footcap boxes for around £10, but nearly all plastic trays are around £2.50 to £3 each with extra for support posts. The box type systems are arguably better for many purposes than expanding files, which tend to cost £6-£10 each depending on durability, and are impossible to lift when full. A properly divided set of boxes allows easy movement, better protection and slacking.

Now that the microprocessor has made its way into education, the problem of handling stacks of fragile floppy disks arises. At present, the



Esselte files and trays

floppy disk market is in chaos. Recommended disks may cost £4.50 each (it only takes a careless finger to destroy one) but perfectly good, identical disks can be bought unlabelled for £2 or even as little as £1 each. The reason for this is that the manufacturers no longer make low density, single sided disks. They make double density, double sided ones, and those rejected during testing are re-tested to see if they will work at a lower information density, or on just one side only. This has very much reduced the cost.

You may be offered ten diskettes for £22, or 10 with a library case for £27. £5 for a plastic case? For under £20 you can get a steel filing drawer unit over 14 inches deep, 8 inches wide and 6 inches high. Fit an internal barrier by Pet and similar computers. It will provide much more protection than plastic cases, and hold twice as many diskettes for the cost.

Security filing cabinets, capable of resisting fire and impact, are probably the most expensive storage media apart from safes you are likely to need. The cost of good two-drawer fireproof cabinet is around £300-400, and there is then the problem of deciding which files should be in it. Given the high incidence of fires when schools are broken into (and the amount of combustible material) a security cabinet makes sense when you have pupil records to safeguard.

Banker's Box, Kirk Sandall Industrial Estate, Doncaster Rd, Kirk Sandall, North Yorkshire. Esselte Dymo Ltd, Spur Road, Feltham, Middlesex TW14 0SL. British Stationery and Office Products Federation, 6 Wimpole St, London W1M 8AS. Click Systems Ltd, Field Industrial Estate, Clover St, Kirkby in Ashfield, Notts.

Comprehensive databases

John A Willson outlines the advantages of Prestel for careers teachers

The amount of paper which pours into schools is enormous, much of it directed at careers staff who have to find shelf space for output from polytechnics, Colleges and Institutes, Universities, careers magazine publishers, and many others. Moreover, libraries, which can be indexed and catalogued and have a reasonably shelf life, careers literature changes very frequently, old prospectuses do not get thrown out always, and it is easy for out of date information to be kept in circulation.

Equipped with a Prestel receiver, the careers teacher now has access to volumes of information which can drastically reduce the time needed for search and retrieval and is likely to be up-to-date. Prestel is not a database for press advertising which is likely to replace the traditional prospectus which can supply a comprehensive picture of an institution, but it can supply a digest of information and

help to narrow the field of choice, or place a course or career in sharper focus. It can also direct attention to relevant literature and addresses.

Advice on courses and careers features prominently. The Council for Educational Technology offers National Education Information material of interest to those both under and over sixteen, and information on examinations and qualifications. The TEC database gives information on courses run by Colleges, Institutes and Polytechnics for technicians in Engineering, Construction, Science, Art and Design, and BEC has covered courses in Business and Secretarial Studies. The Standing Conference of Colleges and Institutes gives information about courses, and the CNA is also represented.

The National Information on Education database provides details of school subject, and job-related courses, and courses up to degree level, as well as education for the handicapped. The

UCCA system is fully presented. The Careers and Occupational Information Centre has a comprehensive database covering the choice of career (basic information, careers related to a pupil's best school subjects or interests, and personal careers advice), careers publications and advisory services, job centres and training services, and Job Library services. The Open University, NFER, ISIS, as well as the National Extension College are all offering detailed information. In addition, the Middlesex Polytechnic, and the South Glamorgan Institute of Higher Education, Cardiff have shown commendable enterprise and initiative in participating in depth. Clearly this is only a beginning.

Careers offices could make use of the Prestel system not only to gain easy and immediate access to this large bank of information, but also to create their own means of disseminating local information via the TV sets in schools

continued on next page

Adult Education & Training Audio Equipment & Systems Audio-visual Equipment Books and Publications Broadcasting (Radio & TV) Careers Services Conference Facilities Consultancy Services Commercial Training Computers Correspondence Courses Craft Training Educational & Management Games Electrical Mechanical & Chemical Teaching Aids Engineering Teaching Equipment Films Video Producers & Libraries Furniture and Partitions Industrial Training Boards Journals and Publications Language Laboratories and Teaching Material Library Supplies Micro-processor Technology and Applications Office Equipment, copiers and duplicators Official & Professional Bodies Photographic Equipment Printing and Proofing Professional Training and Development Projects Records, Cassettes Research Organisations Science Tapes and Discs Technical Books, Periodicals Training Services Video Equipment & Recordings and Vocational Training Whiteboards and Marker Boards Adult Education & Training Audio Equipment & Systems Audio Visual Services Commercial

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Processors that can eat your words

David Kilpatrick on computerised typewriting

This article was written on a word processor; that's not unique today, and it certainly won't be tomorrow. Despite the considerable emphasis on computer and microprocessor science in secondary schools, the office equipment market keeps several steps ahead of the rest of us. The new bottleneck has nothing to do with computers, but with word processors and how to use them.

Computers, in normal business practice, eat figures. They don't eat, or generate, words. Figures start off on paper and are "input" into the computer. Most of the structure of paperwork and the words which go with the figures are in the computer's software to start with.

This is not the case with word processing. However "interactive" a word processor may be in prompting the operator to make the right move, word processors need words. They demand literacy where computers demand numeracy.

There are two types of word processor on the market today. There is the hardware dedicated word processor, which has been built for the purpose and has no other role. At the lower end you find intelligent typewriters with single line displays and limited memory storage (Olivetti, Facit, IBM and a growing host of others). At the top end you find complete systems from IBM, Wang, Adler/Imperial, Diablo, and names from both the computing and office equipment fields.

Secretarial colleges have found the middle price-range systems of this type useful. Adler's Bitsy (the machine I use for journalism lists) has formed the basis for a successful educational package. But although the potential of dedicated systems like this is considerable, each makes its own routines and instructions, and user programming is not part of the philosophy. The general principles of word processing can be learned together with one specific detailed routine - at a cost too great for schools, typically between £600 and £1200 for a single system.

The second type of system is software-based. It can be run on any of a few dozen small computer systems including those in widespread school use - Apple, Commodore Pet, Horizon North Star, Cromemco, Sorcerer, Rair and others. A software-based WP package converts a computer into a word processor. Although the keyboard may not have keys labelled "Delete character" or "Insert line", other function keys assume these roles. You can stick new labels over the keys. Most packages use simple instruction codes (as do dedicated systems). Pressing "D" then "L" typically means "Delete line" in the appropriate con-

text, and so on. Hopefully such single-letter codes will one day be standardized.

Packages of this type include Wordcraft and Wordstar, which is the most popular for microcomputer. The main difference between these packages and dedicated systems is that dedicated WP machine has all the other necessary functions built in to its software: calculations, data storage, alpha-numerical sorting and indexing and perhaps even business functions like invoicing may be included. Because some of these aspects are often covered by existing separate packages on microcomputers, their word processing packages often cover only the text-juggling side of the business.

A typical package for an existing micro might cost between £175 and £350 depending on origin and complexity. For teaching purposes, this is all that is needed. In a working office, the cost of word processing is boosted by the price of high quality printers. You can now buy a small printer from Sharp and others able to print "matrix" characters (built up from needle dots) on an A4 width paper roll at 30 characters per second from £120. More versatile fast printers cost from £200 to £800.

Business letters need better quality, indistinguishable from typewritten work. So far the only popular solution has been the daisy wheel printer (interchangeable type discs, from 45 to 60 characters per second, fine quality) at around £1250 to £2000. The first move down has come from Adler, whose Alphatronic system uses a single element (golbal type) printer directly switched from their typewriter production line, but typing at half the speed. A complete system then costs around £2350.

None of this answers the future's problem - word processors without words to process. The art of writing for the word processor is a new skill. Here are some basic WP applications, which may explain why "word processing" is about to become a very dated word, replaced by "information processing".

Standard letter storage: the word processor holds a letter with a fixed format including spaces left in all the right places for variable information. The art of writing the basic letter includes coping with the chance of having one space with no information, variable single/plural items, and even variable gender.

Permanent data storage: all the information relating to each item or person in a list is broken down and stored so that any one aspect can be recovered instantly. Address lists may typically contain each address broken down into title (Mr, Mrs, The Rt. Hon

etc), forename or initials, surname, house and street, district or town, county or city, postcode and perhaps telephone number or status of listed person. As a project, ask senior pupils to discover how many categories you need to avoid when writing a letter, from "Dear Sir Thompson", to "Dear Mr Johnson O.B.E.", to "Include a Bishop and an Earl as well".

Data indexing: random data, including words and numbers, is "input" first for subsequent sorting by the system. Translation: a language department prepares foreign language equivalents of paragraphs of English text and codes them to key in, so that a letter written in English can automatically be printed in French, German or Spanish.

Editing: a block of text is altered for United States readers by asking the system to go through and change "through" to "thru" every time it appears, and so on with other words.

All these functions can be taught and experienced without a word processor or computer of any sort on paper. Most of them involve logical decisions and the ability to spot conflict. Thinking in this way will be essential in the office of tomorrow unless a new breed of business writers emerges, providing standard letter wordings to businesses and training staff in their correct use.

There are other subtleties. Some word processors will store 50,000 words in their own dictionary (IBM, for example) and when there is a need to break a word at a line end with a hyphen, the correct hyphenation points are shown by the dictionary. This is expensive. Others (my own Bitsy is one) break the word at random and simply ask the operator to change this position if it is wrong. English teachers will have to ensure that typists know the syllabic structure of the language as well as the spelling.

In two months as one of the first electronic journalists in the UK outside newspaper offices using "direct input terminals", I have few complaints. The sheer ease of correction or wholesale alteration makes using an electronic keyboard and display screen a delight (and far quicker than a good typewriter).

In showing my system to nephews in their early teens I was astounded at how rapidly all the functions were picked up and at the success rate. My 6 year-old son is perfectly capable of writing on the system, knows all the instructions, talks about floppy discs and print-out, and reads the articles on the screen.

The only complaint is that word processors don't play space invaders!

Potential alternative

Alec Wood describes another computer language

Microcomputers are now quite commonplace in our schools. However their use is still restricted in the main to mathematical and computer studies applications. Their failure to make an immediate impact in other areas of the curriculum is principally due to the lack of suitable good quality software for these subject areas. The lack of software is due mainly to the fact that the microcomputers are programmed in general purpose languages such as BASIC (Beginners All purpose Symbolic Instruction Code) and FORTRAN (FORmula TRANslator).

Teachers who have tried to write teaching programmes using these languages are probably aware of their shortcomings, particularly their unsuitability for handling text in a flexible, interactive way, which has meant that enthusiastic subject teachers have to become quite expert programmers before they have been able to produce professional results.

However this is not the case if a specialist author language such as PILOT (Programmed Inquiry, Learning Or Teaching) is used. This language is easy to learn, simple to use,

operation codes. The teacher is provided with a few single letter modifiers and conditioners. By combining these, many different and powerful instructions can be made.

Problems such as the use of lower or upper case, simple spelling errors, and of words instead of or as well as digits, can all be taken care of automatically. The text handling provided by PILOT is so flexible that the correct response expected from the student may be embedded in a sentence and will still be recognized by the computer. These features make PILOT particularly attractive to language teachers.

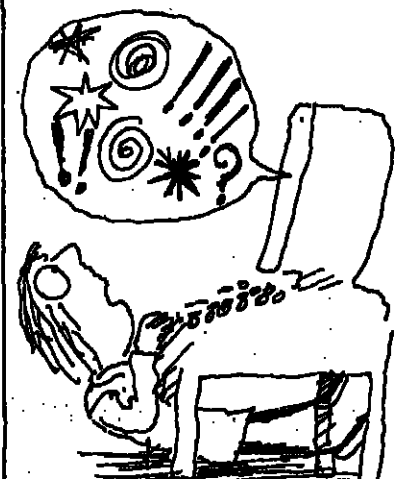
PILOT has been under development since 1971. It originated at the San Francisco Medical Centre and was later developed and standardized at Western Washington University as Common Pilot. Until recently it was only available in this country on a very limited number of microcomputers. However manufacturers are now realizing its importance and one major microcomputer manufacturer, eager to make inroads into the educational market, has produced an excellent and full implementation of Common Pilot for their machine.

Unfortunately a number of non-standard and rather trivial versions also exist so teachers wishing to obtain PILOT in addition to Basic should check that they are supplied with a version of Common Pilot.

In an attempt to make the language more widely available I have produced an inexpensive version of Common Pilot that will run on most 280 based microcomputers such as the RML 380Z, Tandy, Sharp, Sorcerer, Macom etc. Details can also be supplied for versions for other popular machines such as the PET and Apple. The UK PILOT user's Group has available as 40 page A4 size Common Pilot Language Reference Manual for £5, and a receipt of a stamped addressed envelope, can supply brief details of various Pilot interpreters. Reprints of articles on Pilot are also available on loan.

There is little doubt that a simple language such as PILOT is essential if the classroom teacher is to play a part in writing the software required to achieve the strategy of the Government's Microelectronics in Education Programme (MEP), and enable microcomputers to achieve the impact in schools of which they are capable.

For further details of PILOT please contact: Alec Wood, UK PILOT User's Group, Wirral Grammar School for Boys, Cross Lane, Bebington, Wirral, Merseyside L63 3AQ. (Cheques for manuals should be made payable to the school.)



General purpose languages such as Basic

and yet provides the ordinary teacher with some very sophisticated programming power. Essentially it takes all the housekeeping tasks out of programming and allows the teacher to concentrate on teaching strategy. PILOT differs from other teacher interfaces such as the National Physical Laboratory's EDUTECH in the degree of freedom and sophistication of programming that it can provide.

It is able to do this by reducing the major operations required by the teacher to fewer than ten. These are represented by single or double letter

Databases (continued)

and colleges. This might include information about local job vacancies, or the types of jobs in which vacancies exist. Because of the inherent flexibility of the system it would be simple to update. Material of a more permanent nature could be tape recorded using a relatively inexpensive tape cassette recorder and made available to each school for replaying through their own TV set.

The present arrangements for conveying details of late course vacancies are far from satisfactory. Prestel could supply these at the touch of a button. It is possible to operate the Prestel system with some degree of confidentiality by using a special code unique to a user - this can prevent unauthorised access and ensure that only those in possession of the code can retrieve information.

It is also possible for a careers service, acting as a central information provider, to receive via a "response" page, requests from individual schools for the supply of specific items such as careers leaflets, lists of addresses, and other literature. Such items could be listed on the screen along with a reference number for ordering. This system is already in operation for commercial companies; consumers can order goods from their armchair. Its adaptation to the careers services would be easy.

The establishment of a database for careers information and advice on a local or regional level could add a completely new dimension to the service available to schools and parents, but even now any school within reach of a Prestel Centre can have access to the existing national information. All that is required is a telephone connection and the necessary adapter for the present school TV set, or the replacement of the set with one designed also to receive Prestel.

Most TV companies can help with both. The cost of an adaptor such as the Eye Viewdata 7100, which will operate on any standard TV aerial socket, is about £15 to £16 per month, or £150 for outright purchase. This includes a sixteen button keypad. A replacement set such as the Taniel is about £100 (including VAT). Rental is also possible. Schools which already have a Visual Display Unit such as the Apple type can also have it adapted for Prestel reception. Prices are climbing and it is clear that none of the points involved in installing Prestel are beyond the means of most secondary schools, especially if they were to enter the help of a parent teacher association for fund raising. Moreover, the existing careers information would be of considerable interest to parents as well as teachers.



David Bradley as Billy in 'Kas' I, directed by Ken Loach, "a potentially sympathetic media professional".

Structuralism on screen

Raymond Durgnat

Angry cries still re-echo from the Cambridge student structuralism in "Eng Lit", a second structuralist controversy, over film studies, looks like looking up.

Film studies are less marginal than they may seem. They're the oldest of the audio-visual mass media. They overlap with many subjects, notably psychology, communication theory, film, and the popular culture debate. But they're also very tempting to axe, in these hard times. A thumbnail sketch of the issues may come from the idea.

Structuralism, Lévi-Strauss applied it to anthropology, and, by implication, to civilisation too. Barthes persuaded many that linguistics should dominate, not only the analysis of all kinds, including the media, and meanings of all kinds, including the media. He was widely linked to the structuralism of the student riots in Paris which nearly toppled the French Republic. The current interest in communication theory, and McLuhan on the one hand, and all these propositions "sexy", as people say. They exaggerated a

appeal to structure looked highly scientific.

But there's a catch. Most sciences prescribe their own structures, systems and complex processes. Ecology, for example, is a thoroughly structural science, but the structures it studies obviously don't arise from language. Indeed, the structures of language are exceptionally loose and open, so that many other structures can be described in it. It is this looseness which reads the individual subject. Hence Jean Piaget roundly rejected this merely linguistic structuralism, on behalf of psychology, and inter-disciplinary studies.

The structuralist package came to London in time to coincide with a policy change by the British Film Institute. Hitherto the BFI had rather neglected higher education's expanding interest in film/TV. When it suddenly reversed its policy, an Althusserian persuasion could easily take over both its education department, and its tributary, SEFT (The Society for Education in Film and Television), which publishes two journals, *Screen* and *Screen Education*.

By 1979 Derek Malcolm, film critic of *The Guardian*, wrote in the *New Statesman*, "Those who wish to start film courses invariably write to the BFI for help. The result is depressingly predictable - another semiologist is trotted out for inspection and probable appointment... semiology, in the hands of its most rigid alumni, has become (a) virtually unintelligible, (b) Stalinist in outlook, and (c) dismissively selective."

The real damage is done by Malcolm's point (b) - a militant exclusivism. Its scorn for "bourgeois culture" pretty well *en bloc* leads to dictats like "the human subject has been abolished". It

asserts anti-humanism within the humanities. It scorns empiricism. It shrugs off interdisciplinary approaches as "furious eclecticism". It flattens sociology beneath notions of one dominant ideology.

But this anti-bourgeois overkill becomes self-sabotaging. For cine-semiology, although uneasy over its inability to analyse pictures, couldn't or wouldn't turn for help to bourgeois science, e.g. gestalt psychology. Similarly, Peter Wollen's influential book, *Signs and Meanings in the Cinema*, gives an account of "bourgeois" ideas about art which is mostly 40 years out of date and sometimes nearly a century behind the times.

Similarly, structuralists regularly teach that bourgeois thought is idealistic not materialist, that it substitutes ideas of "genius" for social pressures, that its empiricism rules out theories, etc. And this description bewilders students for whom such things are common sense.

A rigidity viable in some disciplines is disastrous in film studies. First, because they involve an extraordinary variety of factors - market economics, cultural institutions, social moods, varied technologies. Moreover, they involve aspects of all the arts (pictures, words, music, performance).

Ironically, the Europeans who propagated this approach to film now confess that their linguistics model was entirely misguided. This left the apologists of theoretical rigor with no theory. They are trying to find new assumptions, and currently pin particular faith on Lacan's brand of Freud. But that's the stickiest of wickets; for Freudian theory, always narrow and unstable, is away from the BFI, and favouring diversity by spreading it around a variety of institutions.

has also been queered. There's been a range of Marxist revisions against Althusser, led, notably, by the historian E. P. Thompson (in *The Poverty of Theory*) and by the sociologist Simon Clark (in *One-Dimensional Marxism*).

A third lashback, often angry, has come from a wide range of potentially sympathetic media professionals (Lindsay Anderson, Joseph Losey, Kevin Brownlow, Ken Loach, Steve Dwoskin, Jean-Pierre Gorin). It's only fair to say that the very breakdown of theory allows some quite interesting practical criticism to be done. And after all one expects young academics, even if they begin by teaching univisable extremes, to lean on the job, and mellow eventually. But to prescribe benign neglect risks underestimating the determination of the Screen connexion to combat the usual purpose of education in the humanities. Which, I take it, involves presenting a variety of mental sets and tools of thought, and a readiness to think independently of ideological battle-lines. But everybody's arguments to this effect meet with accusations of "bad faith", comparisons with witch-hunts, and so on.

The same animus is crushing when directed against students. In the US I had to lavish remedial reassurance on PhD candidates, including Marxist journalists, whose demoralisation evoked the unlikely young Conservative in *The History Man*. The BFI's institutional position as the central channel of government funding creates a real risk that this acidulous strain will spread right across film/TV studies, and systematically edge out other approaches. In the US, media studies, being less centralized, are healthily varied. They regularly draw in academically able media professionals like Joseph Losey and Paul Schrader.

On present form, there's much to be said for re-routing government support of media studies away from the BFI, and favouring diversity by spreading it around a variety of institutions.

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PRESTEL PAGE 445

John C. 1516

extra

Processors that can eat your words

David Kilpatrick on computerised typewriting

This article was written on a word processor; that's not unique today, and it certainly won't be tomorrow. Despite the considerable emphasis on computer and microprocessor science in secondary schools, the office equipment market keeps several steps ahead of the rest of us. The new bottleneck has nothing to do with computers, but with word processors and how to use them.

Computers, in normal business practice, eat figures. They don't eat, or generate, words. Figures start off on paper and are "input" into the computer. Most of the structure of paperwork and the words which go with the figures are in the computer's software to start with.

This is not the case with word processing. However "interactive" a word processor may be in prompting the operator to make the right move, word processors need words. They demand literacy where computers demand numeracy.

There are two types of word processor on the market today. There is the hardware dedicated word processor, which has been built for the purpose and has no other role. At the lower end you find intelligent typewriters with single line displays and limited memory storage (Olivetti, Facit, IBM and a growing host of others). At the top end you find complete systems from IBM, Wang, Adler Imperial, Diablo, and names from both the computing and office equipment fields.

Secretarial colleges have found the middle price-range systems of this type useful. Adler's Bisy (the machine I use for journalism lists) has formed the basis for a successful educational package. But although the potential of dedicated systems like this is considerable, each make has its own routines and instructions, and user programming is not part of the philosophy. The general principles of word processing can be learned together with one specific detailed routine - at a cost too great for schools, typically between £6000 and £12000 for a single system.

The second type of system is software-based. It can be run on any of a few dozen small computer systems including those in widespread school use - Apple, Commodore Pet, Horizon North Star, Cromemco, Sorbus, Rait and others. A software-based WP package converts a computer into a word processor. Although the keyboard may not have keys labelled "Delete character" or "Insert line", other function keys assume these roles. You can stick new labels over the keys. Most packages use simple instruction codes (as do dedicated systems). Pressing "D" then "L" typically means "Delete line" in the appropriate context.

text, and so on. Hopefully such single-letter codes will one day be standardised.

Packages of this type include Wordcraft and Wordstar, which is the most popular for microcomputer. The main difference between these packages and dedicated systems is that dedicated WP machine has all the other necessary functions built in to its software: calculations, data storage, alpha-numerical sorting and indexing and perhaps even business functions like invoicing may be included. Because some of these aspects are often covered by existing separate packages on microcomputers, their word processing packages often cover only the text-juggling side of the business.

A typical package for an existing micro might cost between £175 and £350 depending on origin and complexity. For teaching purposes, this is all that is needed. In a working office, the cost of word processing is boosted by the price of high quality printers. You can now buy a small printer from Sharp and others able to print "matrix" characters (built up from needle dots) on an A4 width paper roll at 30 characters per second from £120. More versatile fast printers cost from £200 to £800.

Business letters need better quality, indistinguishable from typewritten work. So far the only popular solution has been the daisy wheel printer (interchangeable type discs, from 45 to 60 characters per second, fine quality) at around £1250 to £2000. The first move down has come from Adler, whose Alphatronic system uses a single element (golfball type) printer deftly switched from their typewriter production line, but typing at half the speed. A complete system then costs around £2350.

None of this answers the future's problem - word processors without words to process. The art of writing for the word processor is a new skill.

Here are some basic WP applications, which may explain why "word processing" is about to become a very dated word, replaced by "information processing".

Standard letter storage: the word processor holds a letter with a fixed format including spaces left in all the right places for variable information. The art of writing the basic letter includes coping with the chance of having one space with no information, variable single/plural items, and even variable gender.

Permanent data storage: all the information relating to each item, or person in a list is broken down and stored so that any one aspect can be recovered instantly. Address lists may typically contain each address broken down into title (Mr, Mrs, The Rt. Hon

etc), forename or initials, surname, house and street, district or town, county or city, postcode and perhaps telephone number or status of listed person. As a project, ask senior pupils to discover how many categories you need to avoid when writing a letter, from "Dear Sir Thompson", to "Dear Mr Johnson O.B.E.". Include a Bishop and an Earl as well!

Data indexing: random data, including words and numbers, is "input" first for subsequent sorting by the system. Translation: a language department prepares foreign language equivalents of paragraphs of English text and codes them to key in, so that a letter written in English can automatically be printed in French, German or Spanish.

Editing: a block of text is altered for United States readers by asking the system to go through and change "through" to "thru" every time it appears, and so on with other words.

All these functions can be taught and experienced without a word processor or computer of any sort on paper. Most of them involve logical decisions and the ability to spot conflict. Thinking in this way will be essential in the office of tomorrow unless a new breed of business writers emerges, providing standard letter wordings to businesses and training staff in their correct use.

There are other subtleties. Some word processors will store 50,000 words in their own dictionary (IBM, for example) and when there is a need to break a word at a line end with a hyphen, the correct hyphenation points are shown by the dictionary. This is expensive. Others (my own Bisy is one) break the word at random and simply ask the operator to change this position if it is wrong. English teachers will have to ensure that typists know the syllabic structure of the language as well as the spelling.

In two months as one of the first electronic journalists in the UK outside newspaper offices using "direct input terminals", I have few complaints. The sheer ease of correction or wholesale alteration makes using an electronic keyboard and display screen a delight (and far quicker than a good typewriter).

In showing my system to nephews in their early teens I was astounded at how rapidly all the functions were picked up and at the success rate. My 6 year-old son is perfectly capable of writing on the system, knows all the instructions, talks about floppy discs and print-out, and reads the articles on the screen.

The only complaint is that word processors don't play space invaders!

Potential alternative

Alec Wood describes another computer language

Microcomputers are now quite commonplace in our schools. However their use is still restricted in the main to mathematical and computer studies applications. Their failure to make an immediate impact in other areas of the curriculum is principally due to the lack of suitable good quality software for these subject areas. The lack of software is due mainly to the fact that the microcomputers are programmed in general purpose languages such as BASIC (Beginners All purpose Symbolic Instruction Code) and FORTRAN (FORmula TRANslator).

Teachers who have tried to write teaching programmes using these languages are probably aware of their shortcomings, particularly their unsuitability for handling text in a flexible, interactive way, which has meant that enthusiastic subject teachers have to become quite expert programmers before they have been able to produce professional results.

However this is not the case if a specialist author language such as PILOT (Programmed Inquiry, Learning Or Teaching) is used. This language is easy to learn, simple to use,

operation codes. The teacher is also provided with a few single letter modifiers and conditioners. By combining these, many different and powerful instructions can be made.

Problems such as the use of lower case, simple spelling errors, use of words instead of or as well as digits can all be taken care of automatically. The text handling provided by PILOT is so flexible that the correct response expected from the student may be embedded in a sentence and will still be recognised by the computer. These features make PILOT particularly attractive to language teachers.

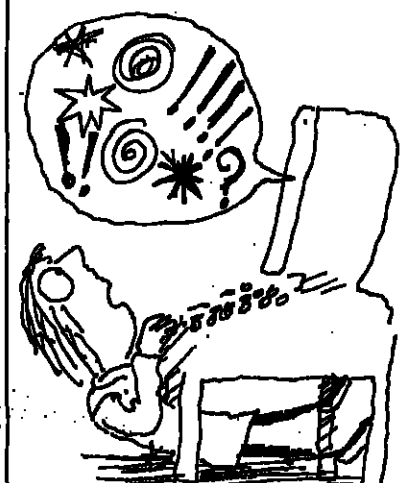
PILOT has been under development since 1971. It originated at the San Francisco Medical Centre and was later developed and standardised at Western Washington University as Common Pilot. Until recently it was only available in this country on a very limited number of microcomputers. However manufacturers are now realizing its importance and one major microcomputer manufacturer, eager to make inroads into the educational market, has produced an excellent and full implementation of Common Pilot for their machine.

Unfortunately a number of non-standard and rather rival versions also exist so teachers wishing to obtain PILOT in addition to Basic should check that they are supplied with a version of Common Pilot.

In an attempt to make the language more widely available I have produced an inexpensive version of Common Pilot that will run on most 280 based microcomputers such as the RML-380Z, Tandy, Sharp, Sorcerer, Necom etc. Details can also be supplied of versions for other popular machines such as the PET and Apple. The UK PILOT user's Group has available an 8 page A4 size Common Pilot Language Reference Manual for £5, and a receipt of a stamped address envelope, can supply brief details of various PILOT interpreters. Reprints of articles on PILOT are also available on loan.

There is little doubt that a simple language such as PILOT is essential if the classroom teacher is to play a part in writing the software required to achieve the strategy of the Government's Microelectronics in Education Programme (MEP), and enable microcomputers to achieve the impact in schools of which they are capable.

For further details of PILOT please contact: Alec Wood, UK PILOT User's Group, Wirral Grammar School for Boys, Cross Lane, Bebington, Wirral, Merseyside L63 3AQ. (Cheques for manuals should be made payable to the school.)



General purpose languages such as Basic

and yet provides the ordinary teacher with some very sophisticated programming power. Essentially it takes all the housekeeping tasks out of programming and allows the teacher to concentrate on teaching strategy. PILOT differs from other teacher interfaces such as the National Physical Laboratory's EDUTEXT in the degree of freedom and sophistication of programming that it can provide.

It is able to do this by reducing the major operations required by the teacher to fewer than ten. These are represented by single or double letter

Databases (continued)

and colleges. This might include information about local job vacancies, or the types of jobs in which vacancies exist. Because of the inherent flexibility of the system it would be simple to update. Material of a more permanent nature could be tape recorded using a relatively inexpensive tape cassette recorder and made available to each school for replaying through their own TV set.

The present arrangements for conveying details of late course vacancies are far from satisfactory. Prestel could supply these at the touch of a button. It is possible to operate the Prestel system with some degree of confidentiality by using a special code unique to a user - this can prevent unauthorised access and ensure that only those in possession of the code can retrieve information.

It is also possible for a careers service, acting as a central information provider, to receive via a "response" page, requests from individual schools for the supply of specific items such as careers leaflets, lists of addresses, and other literature. Such items could be listed on the screen, along with a reference number for ordering. This system is already in operation for commercial companies; consumers can order goods from their armchair. Its adaptation to the careers services

would be easy. The establishment of a database for careers information and advice on a local or regional level could add a completely new dimension to the service available to schools and parents, but even now any school within reach of a Prestel Centre can have access to the existing national information. All that is required is a telephone connection and the necessary adaptor for the present school TV set, or the replacement of the set with one designed for reception of Prestel.

Most TV companies can help with both. The cost of an adaptor such as the Pye Viewdata 7050, which will operate on any standard TV set, is about £15 to £16 per month, or £180 for outright purchase. This includes a sixteen button keypad. A replacement set such as the Tantal is about £150 (including VAT). Rental is also possible. Schools which already have a Visual Display Unit such as the Apple II can also have it adapted for Prestel reception. Prices are tumbling and it is clear that none of the costs involved in installing Prestel are beyond the means of most secondary schools, especially if they were to employ the help of a parent teacher association for fund raising. Moreover, the existing radicalism of the student riots in Paris 1968 which nearly toppled the French government, the current interest in communication theory, and McLuhan on the "media" have all these propositions "sexy" as the young people say. They exaggerated a considerable interest in parents as well as teachers.



David Bradley as Billy in 'Kes', directed by Ken Loach, "a potentially sympathetic media professional"

Structuralism on screen

Raymond Durnat

As angry cries still re-echo from the Cambridge riots over structuralism in "Eng Lit", a second structuralist controversy, over film studies, looks like boiling up.

Film studies are less marginal than they may seem. They're the oldest of the audio-visual media. They overlap with many subjects, notably sociology, psychology, communication theory, the arts, and the popular culture debate. But they're also very tempting to axe, in these hard times. A thumbnail sketch of the issues may come as useful.

It took its cue from certain linguists. They asserted that the forms and structures of language describe the models and limits of all thought, including our knowledge of the outside world. Thus all subjects would in some way be dominated or coordinated by linguistics. Four Parisians popularised the idea.

In anthropology, Lévi-Strauss applied it to "brave thought", and, by implication, to civilised thought too. Barthes persuaded many people that linguistics should dominate, not the study of art and meanings of all kinds, including films. It is due to Barthes that structuralism in film is usually called semiology. Lacan, a disciple of Freud, crossed this linguistics with aspects of Freud.

Althusser grafted structuralism onto Marxism. He argued that they involve one another and are inseparable in combination. The class which dominates society controls the codes, and these dominate thought so tightly that individually is entirely predictable - another semiotologist is trotted out for inspection and probable appointment.

Outside Paris this was widely linked to the existing radicalism of the student riots in Paris 1968 which nearly toppled the French government. The current interest in communication theory, and McLuhan on the "media" have all these propositions "sexy" as the young people say. They exaggerated a considerable interest in parents as well as teachers.

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But there's a catch. Most sciences prescribe their own structures, systems and complex processes. Ecology, for example, is a thoroughly structural science, but the structures it studies obviously don't arise from language. Indeed, the structures of language are exceptionally loose and open, so that many other structures can be described in it. It is this looseness which renders the individual subject. Hence Jean Piaget roundly rejected this merely linguistic structuralism, on behalf of psychology, and inter-disciplinary studies.

The structuralist package came to London in time to coincide with a policy change by the British Film Institute. Hitherto the BFI had rather neglected higher education's expanding interest in film/TV. When it suddenly reversed its policy, an Althusserian persuasion could easily take over both its education department, and its tributary, SEFT (The Society for Education in OFilm and Television), which publishes two journals, *Screen* and *Screen Education*.

By 1979 Derek Malcolm, film critic of *The Guardian*, wrote in the *New Statesman*: "Those who wish to start film courses invariably write to the BFI for help. The result is depressingly predictable - another semiotologist is trotted out for inspection and probable appointment. . . semiology, in the hands of its most rigid alumni, has become (a) virtually unintelligible, (b) Stalinist in outlook, and (c) dismissively selective."

The real damage is done by Malcolm's point (c) - a militant exclusivism. Its scorn for "bourgeois culture" pretty well *en bloc* leads to distorts like "the human subject has been abolished". It

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But this anti-bourgeois overkill becomes self-sabotaging. For cine-semiology, although uneasy over its inability to analyse pictures, couldn't or wouldn't turn for help to bourgeois science, e.g. gestalt psychology. Similarly, Peter Wollen's influential book, *Signs and Meanings in the Cinema*, gives an account of "bourgeois" ideas about art which is mostly 40 years out of date and sometimes nearly a century behind the times.

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Ironically, the Europeans who propagated this approach to film now confess that their linguistics model was entirely misguided. This left the apologetics of theoretical rigour with no theory. They are trying to find new assumptions, and currently pin particular faith on Lacan's brand of Freud. But that's the sickest of wickets; for Freudian theory, always narrow and unstable, is currently in crisis.

"As if this weren't enough, the ideological pitch

has also been queered. There's been a range of Marxist revisions against Althusser, led, notably, by the historian E. P. Thompson (in *The Poverty of Theory*) and by the sociologist Simon Clark (in *One-Dimensional Marxism*).

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endpage

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PRESTEL PAGE 445

THE TIMES EDUCATIONAL SUPPLEMENT 26.6.81



**The Times
Educational
Supplement**

Index to Appointments Vacant, Wanted and other classifications

Appointments vacant		Secondary Education		Sixth Form and Tertiary Colleges		Pastoral		Universities		Appointments wanted	
Nursery Education		Headships		Scale 2 Posts		Physical Education		Studentships and Research Awards			
Headships	43	Deputy Headships Senior Masters/Mistresses		Scale 1 Posts	57	Religious Education	61		65		70
Other Appointments	43	Remedial Posts	45	Special Education		Science	61	Colleges of Higher Education	65		
		Art and Design	46	Classics	47	Other than by Subjects	61				
Primary Education		Classics	47	Headships	57	Preparatory Schools		Adult Education	65	Other Classifications	
Headships	43	Commercial Subjects	48	Deputy Headships Senior Masters/Mistresses	57	Headships	61				
Deputy Headships Senior Masters/Mistresses	43	Domestic Subjects	48	Scale 2 Posts	58	Deputy Headships Senior Masters/Mistresses	61	Community Homes and Associated Institutions	65		
Scale 2 Posts	44	Economics	48	Scale 1 Posts	58	English	62				
Scale 1 Posts	44	English	48			Mathematics	62	Youth and Community Service		Educational Courses	70
		Geography	49	Independent Schools		Modern Languages	62				
		History	50	Headships	59	Music	62	Overseas Appointments	66	Personal Announcements	70
		Humanities	50	Deputy Headships Senior Masters/Mistresses	59	Pastoral	62				
Middle School Education		Mathematics	50	Classics	59	Physical Education	62	Administration		For Sale and Wanted and Postal Shopping	70
Headships	44	Modern Languages	51	Economics	59	Science	62	Local Education Authority	68		
Deputy Headships Senior Masters/Mistresses	45	Music	52	English	59	Other than by Subjects	62	General	69		
Remedial Posts	45	Pastoral	52	Geography	59	Colleges of Further Education	62, 63 & 64	Miscellaneous	69	Holidays and Accommodation	70
Art and Design	45	Physical Education	52	History	59	Colleges and Departments of Art	64	English as a Foreign Language	69	Properties for Sale and Wanted	
Mathematics	45	Religious Education	54	Mathematics	61						
Modern Languages	45	Science	55	Modern Languages	61						
Physical Education	45	Social Studies	56	Music	61						
Technical Studies	45	Speech and Drama	56								
Other than by Subjects	45	Technical Studies	56								
		Other than by Subjects	57								

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Scale 1

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School, 1 Mile Road, Bedford

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2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 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2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 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2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2



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Head of Mathematics Scale 3.3.
A member of staff is required to teach Mathematics to Year 10 and 11. An outstanding candidate would be offered the fifth highest salary in the school. The post is full-time, with a salary of £14,500 per annum. Applications should be sent to the Headmaster, Royal Wolverhampton School, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Other Assistants

HAMPSHIRE

WINCHESTER COLLEGE

Wanted September for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Winchester College, Winchester, SO23 9JX. (16075) 153-80

KENT

ST. MARY'S CONVENT

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, St. Mary's Convent, Canterbury, Kent. (16075) 153-80

KENT

CANON SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Canon School, Canterbury, Kent. (16075) 153-80

NORFOLK

ECLES HALL SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Eccles Hall School, Norwich, Norfolk. (16075) 153-80

SURREY

MATTHEWS TEACHER

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Matthews Teacher, Surrey. (16075) 153-80

SURREY

MATTHEWS TEACHER

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Matthews Teacher, Surrey. (16075) 153-80

Modern Languages

REDFORD

REDFORD LOWER SCHOOL

Wanted September 1981 for one term only, teacher of Modern Languages. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Redford Lower School, Redford, Redford. (16075) 153-80

REDFORD

REDFORD LOWER SCHOOL

Wanted September 1981 for one term only, teacher of Modern Languages. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Redford Lower School, Redford, Redford. (16075) 153-80

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LONDON

TREYOR ROBERTS TUTORIAL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Treyor Roberts Tutorial, London. (16075) 153-80

KENT

THE SACRED HEART SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, The Sacred Heart School, Kent. (16075) 153-80

NORTH WALES

RYDAL SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Rydal School, North Wales. (16075) 153-80

NORTH WALES

RYDAL SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Rydal School, North Wales. (16075) 153-80

Channel Islands

THE LADIES' COLLEGE

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, The Ladies' College, Channel Islands. (16075) 153-80

SUSSEX

WIMBORNE HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Wimborne House School, Sussex. (16075) 153-80

SUSSEX

WIMBORNE HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Wimborne House School, Sussex. (16075) 153-80

HERTFORDSHIRE

THE LADIES' COLLEGE

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, The Ladies' College, Hertfordshire. (16075) 153-80

KENT

STRATFORD HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Stratford House School, Kent. (16075) 153-80

CHILTERNHAM

CHARLTON PARK R.C. INDEPENDENT SCHOOL FOR GIRLS

Wanted September 1981 for one term only, teacher of Mathematics. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Charlton Park R.C. Independent School for Girls, Chilternham. (16075) 153-80

Science

BERKSHIRE

CLAIR COURT

Wanted September 1981 for one term only, teacher of Science. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Clair Court, Berkshire. (16075) 153-80

BERKSHIRE

CLAIR COURT

Wanted September 1981 for one term only, teacher of Science. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Clair Court, Berkshire. (16075) 153-80

HARROW

WIMBORNE HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Science. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Wimborne House School, Harrow. (16075) 153-80

HERTFORD

HERTFORD CATHEDRAL SCHOOL

Wanted September 1981 for one term only, teacher of Science. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Hertford Cathedral School, Hertford. (16075) 153-80

LONDON

WIMBORNE HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Science. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Wimborne House School, London. (16075) 153-80

Pastoral

KENT

THE SACRED HEART SCHOOL

Wanted September 1981 for one term only, teacher of Pastoral. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, The Sacred Heart School, Kent. (16075) 153-80

NORTH WALES

RYDAL SCHOOL

Wanted September 1981 for one term only, teacher of Pastoral. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Rydal School, North Wales. (16075) 153-80

Channel Islands

THE LADIES' COLLEGE

Wanted September 1981 for one term only, teacher of Pastoral. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, The Ladies' College, Channel Islands. (16075) 153-80

SUSSEX

WIMBORNE HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Pastoral. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Wimborne House School, Sussex. (16075) 153-80

HERTFORDSHIRE

THE LADIES' COLLEGE

Wanted September 1981 for one term only, teacher of Pastoral. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, The Ladies' College, Hertfordshire. (16075) 153-80

KENT

STRATFORD HOUSE SCHOOL

Wanted September 1981 for one term only, teacher of Pastoral. The applicant should be able to teach one year beyond O level. Suitable accommodation available. Applications with curriculum vitae and names of two referees to the Headmaster, Stratford House School, Kent. (16075) 153-80

CHILTERNHAM

CHARLTON PARK R.C. INDEPENDENT SCHOOL FOR GIRLS

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Leicestershire PROFESSIONAL ASSISTANT (PRIMARY)

£8,379 - £9,312 p.a.

Application invited from well qualified men and women with good teaching experience. The post offers excellent opportunities for an energetic man or woman to gain experience of education administration in a large authority.

For further particulars write to the undersigned (enclosing s.a.e.).

Apply (no forms) with names and addresses of two referees and enclosing s.a.e. to the Director of Education, County Hall, Glenfield, Leicester by 24th July.

North Yorkshire County Council
NORTH RIDING COLLEGE OF EDUCATION
SCARBOROUGH

Applications are invited for the post of

SENIOR ADMINISTRATIVE OFFICER

to be responsible to the Principal for the general administrative and financial arrangements within a College concerned principally with teacher training, both initial and in-service.

Grade S01. Salary Scale £7,632-£8,138 (under review). Further information and application forms available from The Principal (Appointments), North Riding College of Education, Flay Road, Scarborough YO11 3AZ. Closing date for applications: Monday, 27th July 1981.

TES2221

KENT COUNTY COUNCIL
Education Department

Assistant County Youth and Community Service Officer

£11,121-£12,531 (Spisbury Senior Range (4-8))
(under review)

Applicants must be well qualified and experienced Officers for this post which becomes vacant in October due to the retirement of the present holder. This is a senior appointment with particular responsibility for work with girls, County Voluntary Youth Organisations, Premises and documentation of County policy.

Further particulars and application form returnable by 10th July from W. H. Petty, County Education Officer, Springfield, Maidstone ME22 6JF (411 ext 2481, Ref GP)

TES2221

KENT COUNTY COUNCIL

INSPECTOR/ADVISER FOR HUMANITIES

With special reference to curricular development and support services in the multi-cultural field.
Salary: Southbury Headship Group 8 (£12,540-£13,650).

Applicants will be expected to have good qualifications and experience in education including the holding of a senior post in schools administration or the advisory service.

Application forms and further particulars are available from the Director of Education, Civic Centre, St. Peters Square, Wolverhampton WV1 1RR to whom completed forms should be returned by 14 July 1981.

TES2221

Administration

Local Education Authority

BURY

METROPOLITAN BOROUGH OF
EDUCATION DEPARTMENT
SENIOR CAREERS OFFICER

Grade S.O.1. £7,632 - £8,138 per annum.

Applications are invited from experienced and qualified Careers Officers for the post of Senior Careers Officer with the Bury Careers Service.

The post holder will be responsible for the work of a team of Careers Officers in the provision of advice and guidance to the management and development of the Service and to develop the individual liaison work of the Careers Service.

The post carries a casual car user allowance.

Forms of application obtainable from and returnable to the Chief Executive, Education Department, Bury, BL9 9BW (Telephone 051-754,600, Ext. 9.1) by 10th July 1981.

160291

Belfast Education & Library Board Applications are invited for the post of

CHIEF OFFICER

which will become vacant on 1 February 1982 on the retirement of the present Chief Officer Mr. W. J. Patterson M.A.

The Chief Officer who is also the Chief Education Officer and Secretary to the Board is responsible for co-ordinating and directing the activities of the Board in relation to the provision, maintenance and development of the education and library service, including youth service activities, in the Board's area.

The Board, a corporate body, is the education and library authority for the Belfast area, the area encompassed by the Belfast City Council. The population of the area is approximately 350,700 of whom about 74,800 are children of compulsory school age.

Candidates for appointment must hold a degree or such other professional qualification as is in the opinion of the Board and the Department of Education equivalent thereto and should have an extensive range of experience at an appropriate level in public service administration. Preference will be given to candidates with experience in educational administration.

The salary scale for the post is £19,134 x 408/3-£20,358 (to be reviewed 1 July 1981).

Further information about the appointment is available from the Personnel Officer, Board Headquarters, 40 Academy Street, Belfast BT1 2NQ, telephone Belfast 282111.

The closing date for receipt of completed applications is 4.00 p.m. Friday 24 July 1981.

TES2221

2 SENIOR CAREERS OFFICERS Grade APS/SO1

Salary Range £7,363 p.a. - £8,882 p.a. (inc. London Weighting)

We have two vacancies for Senior Careers Officers, one of whom will conduct specialist casework in our eight Special Schools. This officer will also provide a back-up advisory service for pupils and students referred by a recently introduced early warning system, from our sixteen comprehensive schools as well as working with other handicapped and disadvantaged people. (REF. SCO/A)

The second Senior Post carries responsibility for Employer Liaison for which you will need a special mix of talents. As well as being a qualified and experienced Careers Officer, we are looking for someone with the ability to promote the Careers Service as a reliable source of help to potential employers. So if you are interested in marketing and sales and are well presented, articulate and possessed of a good sense of humour, we would like to hear from you. (REF. SCO/B)

OUTREACH WORKER

Starting Salary £7,363 p.a. (inc. London Weighting)

The high number of disaffected and alienated young, unemployed people in the Borough require significant assistance from a well experienced and qualified Officer. If you are concerned about the problems associated with the difficulties faced by such people and you are confident that you can establish easy working relationships with them, please send for further details of this post. (REF. SCO/C)

APPLICATION ADDRESS: Principal Careers Officer, Newham Careers Service, 383 High Street, Stratford, London E15 4RD. Telephone: 01-354 1374, Ext. 25 (Jean Barron)

Closing Date for ALL three posts: 8th July 1981.

LONDON BOROUGH OF NEWHAM

CROYDON

WE NEED A HEALTH EDUCATION OFFICER
FOR OUR TEAM IN CROYDON

Our Health Education Department is well established and forward looking and there is excellent liaison with the schools in the borough. The present aim is to incorporate Health Education into the general curriculum support to Heads of Department and Head teachers.

Are you a teacher with experience in Health Education interested in helping to continue the development of this important service? We have a Health Education qualification and would like to hear from you. Please telephone Miss S. Elliot, Health Education Officer on 01 885 4233 Ext. 3166.

For application form and job description apply to Area Manager, Department, General Hospital, London Road, Croydon (01-885 7155 Ext. 25811). (178757) 331-80

ESSEX

SECURITY OFFICERS

PART TIME

Required for our Cash in Transit and Thursday Night Cash in Transit. The successful candidates will be required to provide security for the cash in transit. The successful candidates will be required to provide security for the cash in transit. The successful candidates will be required to provide security for the cash in transit.

For further details please apply to the Personnel Dept., on 01 885 4233 Ext. 3166. (178757) 331-80

DEPARTMENT OF EDUCATION AND SCIENCE

HM Inspectors of Schools SECONDARY EDUCATION - CLASSICS

Applications are invited from men and women, preferably aged between 35 and 45, for appointment in England as HM Inspectors, combining general duties with specialist work in Classics. Candidates should have a good academic qualification, experience in teaching one or both Classical Languages and some form of Classical Studies at a variety of levels in either or both the maintained and independent sectors, and knowledge of recent developments in classical teaching and examining.

Starting salary is within the range of £12,325-£17,508 (higher in London). The successful candidates are, however, under review.

Application forms (to be returned by 17th July 1981) and further information may be obtained from Miss J. D. Church, Department of Education and Science, Room 702, Elizabeth House, 39 York Road, London SE1 7PH, telephone 01-928 9222 Ext. 2237. Please quote 1/81E.

TES2201

CHIEF INSPECTOR OF SCHOOLS

Soubury Group 11 Headteacher £15,625-£16,880 plus London Weighting of £488. Appointment to date from 1st January 1982 or earlier by agreement.

Candidates should be well qualified academically and have a proven record of leadership, preferably at headship level in secondary schools and/or advisory work.

The Chief Inspector is required to give leadership and professional oversight to an effective team of Advisers, and to encourage sound educational practice throughout the Authority.

The man or woman appointed will be a member of the senior management team and have scope for making a distinct personal contribution to the quality of the educational service. Relocation expenses will be available in approved cases.



Further details and application form, returnable within 14 days of the appearance of this advertisement, from B.H. Lister, M.A., Director of Educational Services (Ref: J.B.), Mercury House, Mercury Gardens, Romford, Essex RM1 3DR. (178221)

Re-advertisement

Director of Education

£22,306-£23,709 pa

The above post will become vacant in September 1981.

Proven managerial experience and appropriate qualifications are essential prerequisites. Application forms will not be issued, but further details are available on request from the Clerk of the County Council & Chief Executive at the address below. (Telephone Nottingham (0522) 853388 Ext. 39811).

Applications in writing (envelopes marked 'Confidential' and endorsed 'Appointment of Director of Education') should be sent to the Clerk of the County Council & Chief Executive at County Hall by 17 July 1981. Please quote ref. 145.

Nottinghamshire County Council
County Hall West Bridgford
Nottingham NG2 7JF

AREA CAREERS OFFICER

£8,115 - £8,822

Applications are invited from experienced and qualified Careers Officers. The successful applicant will be responsible for the effective leadership of a team of Careers Officers and supporting staff based at the Enfield Careers Office, which deals with ten comprehensive schools and a Technical College. In addition, the post involves making a contribution, as part of the management team, to the running of the service.

Casual user car allowance is payable. Temporary housing (up to 51 weeks), 100% removal expenses (£500 max), generous relocation costs and lodging allowance - where appointee needs to move.

Application forms are available from the Director of Education, P.O. Box 56, Civic Centre, Silver Street, Enfield, EN1 5XQ (Tel: 01-308 8565, Ext. 2118).

Closing date: Please quote reference GGD/173.

LONDON BOROUGH OF ENFIELD

ADMINISTRATION L.E.A.

continued

BUCKINGHAMSHIRE

COUNTY COUNCIL
EDUCATION DEPARTMENT
MUSIC/ARTS EDUCATION OFFICER

Applications are invited from any qualified person with suitable experience and qualifications for the post of Music/Arts Education Officer. The successful candidate will be responsible for the development and delivery of music and arts education in the County. The successful candidate will be responsible for the development and delivery of music and arts education in the County.

For further details please apply to the Director of Education, County Hall, High Wycombe, Bucks HP12 3JF. (17811) 331-80

OWENT

COUNCIL OFFICER

YOUTH AND COMMUNITY SERVICES

Grade A15 £6,651

For further details please apply to the Director of Education, County Hall, High Wycombe, Bucks HP12 3JF. (17811) 331-80

REDFORD

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Break

'Wild man' looks in

The Schools Council's first director of studies, Professor Malcolm Skilbeck, has quietly moved in over the shop in Great Portland Street. The former director of the Australian Advisory Curriculum Development Centre has now hung up his tucker bag in the council's own London flat, from where he has been studying the current British education scene.

The hirsute Australian was described by one of his new colleagues as looking like "a wild man from the bush". His manner, however, leaves little doubt that he is the one playing anthropologist, taking a distinctly man-from-Mars view of the strange rituals of the education cult which he finds on his return to this country.

Brought back to boost the intellectual rigour of the council's curriculum development work, he may have arrived just in time. The Government's Trenaman inquiry is already looking into the desirability and workings of the council. Even the National Union of Teachers complained to it last week about the lack of leadership in the council on curriculum matters. The *Practical Curriculum*, the council's paper on what and how schools should teach, may also be in for some sharp Antipodean analysis, the Canberra



Professor Malcolm Skilbeck: boosting intellectual rigour.

Centre having recently completed its own version of what a common core could be like.

Skilbeck can be outspoken, but how long he will play the wild colonial boy at the council is now uncertain. His appointment is officially to a chair at the London Institute of Education with the understanding that for four-fifths of his time he will work at the council.

At one point it was said that this

would last for five years, but no such contract exists. Now, it seems, his future work could depend on the outcome of the initial evaluation he is doing of the council's curriculum projects - a report on which is due round about the same time as the Trenaman report in September. And, of course, it depends on whether there is any shade left under this particular coolibah tree for a swagman to camp in by the time trooper Trenaman is through with it.

Personal column

Ted Wragg

Smile all the while

Forget *Dallas*, *Match of the Day* and *Coronation Street*, we masochists nowadays most enjoy squirming at the Secretary of State's frantic attempts, firstly to understand, and secondly to answer questions from television interviewers about some new Government pronouncement on education.

"Tell me Secretary of State, does it make sense to close down schools and classrooms and turn them into magistrates' courts and inner-city massage parlours, when the school population will begin to increase again in a few years' time?" asks the news reader, bowling the kind of gentle full toss that ought not to jeopardise the chance of the Government agreeing to the licence fee going up.

Suddenly the screen is filled with a totally bewildered-looking Mark Carlsie (anagram: *A smiler*), the Chaucer character who wanted to go to Canterbury but arrived a week after the others had left. "We have the best pupil-teacher ratios there have ever been" intones the voice with all the spontaneity of the speaking clock, and as much chance of getting a round of applause as Sir Keith Joseph telling one-liners at the Glasgow Empire on a Monday night.

It all reminded me of a regular event in my favourite anodyne television programme *Star Trek*. Every other week, when Jim Kirk and Mr Spock beam down on to an alien planet, you notice some poor sap, who has never been seen before in the series, included in the landing party. The only certain thing about him is that he is definitely not coming back on board. Thus he enters the studio with the resigned look of a bit actor who knows that his sole purpose in the episode is that he is disposable, only there to be evaporated, zapped or transmuted into small white grains by this week's outer-galactic crawler.

Poor Smiler is in exactly the same position, glancing furtively over his shoulder, looking perhaps for Rhodes Boyson (anagram: *Senior Yobshod*), the Spanish minister for juvenile crime), and answering the interviewer's questions like someone with a permanently broken autocue. "One final question, Minister, could you comment on Trevor Brooking's second goal against Hungary?"

"We have the best pupil-teacher ratios there have ever been". Camera cuts to Senior Yobshod, seen sniggering behind hand.

It must be no fun working for a Prime Minister who frightens the life out of you. I was once in the presence of a cabinet minister when someone mentioned "the PM" Now to you and me those two letters may be innocuous indicators of the afternoon and evening, but I can tell you that they turn

cabinet ministers to a substance the consistency of which makes jelly look like granite.

Even less fun is finding yourself spokesman for a government which seems to assume that any reduction in finance, resources or personnel, automatically produces efficiency. Presumably five-a-side football and one-man boxing matches will soon become the norm.

Nor can it be easy when your government issues an edict first and worries about implementation afterwards. Smiler has got himself into another pickle by succumbing to the anti-sex-education lobby and promising that parents can take their children out if they disapprove. I can disclose details from a leaked DES document which has fallen into my hands and which will instruct heads how this can be done.

Basically, the DES will be recommending three methods by which schools may exclude pupils from sex education lessons. The first is the "safe period" method. The teacher agrees to deal with the dicey bits at regular intervals. Pupils stay for the first three weeks of each month and withdraw for the fourth. This method is said to have a very high failure rate.

The second is the coil method, whereby the teacher talks in such convoluted language that no one understands what he is saying anyway. Finally the sheath method allows pupils to remain in class, but sit through sex-education lessons with a paper bag over their heads.

Perhaps the real answer to Smiler's dilemma is that he and Senior Yobshod should not actually appear on news and current affairs programmes at all, but rather on other programmes where the force element is overt rather than incidental.

How about putting over government policy in the cosy snug of the Rover's *Return in Coronation Street*? "Now then, Smiler," says Len Fairclough, leaning across and sipping half a pint of pale ale over his lap. "What's all this about teachers getting the elbow because there's no money in 'kitty'?" "We have the best pupil-teacher ratios there have ever been." "Ee Len," shrieks Hilda Ogden, splitting her curlers with mirth. "Who's yer posh mate?"

Or perhaps a guest appearance for the Southend team in *It's a Knockout*, when, after he has played his joker and headed more blanchmanges into fishing nets than anyone else, Eddie Waring could slip him a quick "Just let the lad wipe the blanchmange off his face. When are you going to implement Warnock, then, Smiler?" "We have the best blanchmange-fishing net ratios there have ever been, ever been, ever been."

Try your own O level parody

Sometimes it seems as if the exam season might be shading straight into the silly season. Consider, for instance, the following question which has just appeared in the Oxford Local English Language O level paper.

Write an article for your school magazine about Colonel Munro, your new Chairman of Governors, selecting your information from the paragraph below.

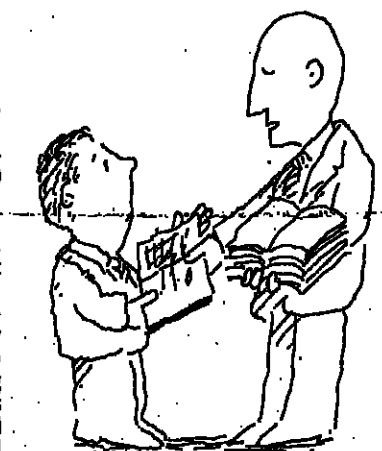
MUNRO, Henry Antony b. Ascot, 1932, 2nd son of Antony Paul Munro and Emily Ann (née Topping). Educated at Ascot School. Captain of the School, Captain of Cricket Higher Certificate with distinctions in Mathematics, Physics and Geography. Subsidiary subjects Russian and French; National Service in Royal Army Service Corps 1951. Commissioned 2nd Lieutenant in Royal Berkshire Regt. Oct. 1952. Regular commissions Lieut 1954, Captain 1960, seconded as a Temporary Major (Instructor) in Royal Tank Regiment, 1962. Special duties in Burma, India, and Thailand, Lt. Colonel 1970. Wounded in Ireland 1978. Awarded DSO and invalided out of army. Publications: *Indian Butterflies*, *Thai Temples*, *The Irish House* (novel). Married Mary Smith 1971, sons born 1973 and 1975. Home:

London. This spirited bit of creative question-setting was sent to *The TES* by John Daniel, principal lecturer in humanities at Plymouth Polytechnic. "After 20 years or more debate about 'relevance' in English studies," he commented, "I have some difficulty in believing that a parody was not intended. Unhappily it obviously was not."

Nevertheless, Mr Daniels immediately dashed off his own parody and sent it to us. He managed not to cover more than one side of the writing paper, as instructed, demonstrated his accuracy in the writing of English and made truly splendid use of the material provided.

In fact, his essay takes on Waugh-like overtones as he follows his hero through from Cricket Captain and Higher Certificate distinctions, via butterfly-chasing in the Far East in the Vietnam era, until he returned as legless war hero after the brutal relevance of Northern Ireland.

"Would I get a pass?" he asked. Well, we thought we'd see what the competition is like first. We are therefore setting the question for Aristides readers, winning entry to be printed in *Talkback*, alongside the full Daniel answer. You may not get an O level out of it, but there will be payment at usual rates. Papers will be marked on July 10.



looking bust of Karl himself beneath. The Communist Party is holding an education conference.

How polite and articulate the comrades are. To the reporter used to Tory baying and Labour ranting, this is balm indeed. They are saying some rather unexpected things, too. "It isn't just a question of money being cut - what are the standards being cut?" asks one. "There are countries where the standard of education is far higher than in Britain and the level of resources much lower. There's a lesson for us somewhere."

He goes on to advocate a hard look at the economics of overseas students' policy. If students from other countries can't study here, they will buy goods elsewhere. He knows of a student - 3As and a B, female, Indian - unable to go to any university in this country who has been forced to go to Moscow. "This is too much for a comrade at the back. 'That's an argument for keeping the fees up!', she exclaims.

Aristides

Next week

The underachievement myth? Valerie Walkerdine and Rosie Waldon on girls and primary maths. What are today's adolescents really like? Bernice Martin reviews a new study. Mark Greengrass reviews a new biography of Isaac Newton, and Paul Driver reports on Peter Maxwell Davies's new work for children. Extra Art.

Special books

Up to now, there has never been a single, easily available bibliography of literature about the special needs of disabled teenagers. Many useful books and pamphlets produced by an already bewildering number of charities, pressure groups, and government institutions for handicaps, therefore, have often languished unread.

From this week onwards, however, it will at least be possible to find out what is on the market, because the National Book League has just published a useful annotated catalogue *The Disabled School-leaver*, listing over 200 titles, and all for only 30p (plus postage). It had been assembled by Whitford Tamlin, who was a member of the Warnock committee.

Looking around the exhibition that runs for the next month at the MEN-AP Bookshop in London's Golden Lane, it is obvious that whatever possible emphasis has been placed on this, strictly practical, *Provision for problem* (see, for example, and books on clothes and for disabled adults.

It isn't all practical hints: a section on autobiography lists some of the best personal descriptions of learning to co-exist with handicap, and there are also accounts by others that discuss the concept of disablement in our society in more general terms. There are no novels or poetry, though; these must wait for perhaps another book-list one day, featuring everyone from Milton onwards who has written about their own or other people's disabilities.

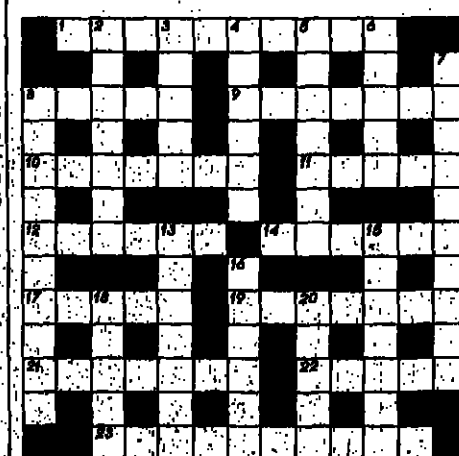
Anybody who would like to hire the touring exhibition can arrange it with the National Book League for £20 a fortnight, or £16 for NBL members.

Seeing red

Saturday afternoon in a quiet house on Clerkenwell Green. About 15 people, many in collar and tie, sit quietly debating higher education. A few smoke. Nobody interrupts anybody else. Is this perhaps an Open University seminar?

Oh no. This is Mark House. Above the red-bearded chairman looms a bronze plate of Lenin, with a kindly

TES Crossword No. 5



ACROSS

- 1 It's not bound to sell (5)
- 2 She has a bad figure (5)
- 3 Understand and cash in (7)
- 4 Continue to flirt (5)
- 5 To add me a quill to a great deal (5)
- 6 Discriptive of a man who can't settle (4)
- 7 Well-known to have made a record (5)
- 8 Storm about like a politician in a hurry (7)
- 9 Not slow to voice an opinion (7)
- 10 I'll reveal a great deal to us (5)
- 11 Opposition to, mixed ancestry (10)

by Rufus

DOWN

- 2 One needs a couple of rings to get this number (7)
- 3 Three points to go to an opponent (5)
- 4 French river I eat from the sea (6)
- 5 It's a man in charge and what keeps him going (7)
- 6 It's cold, but I would make it hot (5)
- 7 A word head means something with it (10)
- 8 He has a lot to offer (10)
- 9 ... and they want to (7)
- 10 It's less made for us than money underground (7)
- 11 Credit is provided in an emergency (6)
- 12 Light with a tendency to grow less (5)
- 13 The east of forward opera-goes (3)

Solution to Puzzle No. 4

1. It's not bound to sell (5)
2. She has a bad figure (5)
3. Understand and cash in (7)
4. Continue to flirt (5)
5. To add me a quill to a great deal (5)
6. Discriptive of a man who can't settle (4)
7. Well-known to have made a record (5)
8. Storm about like a politician in a hurry (7)
9. Not slow to voice an opinion (7)
10. I'll reveal a great deal to us (5)
11. Opposition to, mixed ancestry (10)